



ENVISION

FY14 PY3 Annual Report

October 1, 2013 - September 30, 2014

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envision
a world free of NTDs

ENVISION Annual Report

FY14 PY3

October 1, 2013 – September 30, 2014

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ENVISION PROJECT OVERVIEW

ENVISION is a five-year project funded by the U.S. Agency for International Development (USAID) aimed at providing assistance to national neglected tropical disease (NTD) control programs for the control and elimination of seven targeted NTDs: lymphatic filariasis, onchocerciasis, schistosomiasis, three soil-transmitted helminths (roundworm, hookworm, whipworm) and trachoma. ENVISION will contribute to the global goal of reducing the burden of these targeted NTDs so that they are no longer a public health problem.

ENVISION is implemented by RTI International in partnership with CBM International, The Carter Center, Helen Keller International, IMA World Health, Light for the World, Sightsavers, and World Vision. The period of performance for ENVISION is September 30, 2011 through September 29, 2016.



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LIST OF ACRONYMS

AE	Adverse event
AFRO	Africa Regional Office
ALB	Albendazole
AOR	Agreement Officer's Representative
API	Active pharmaceutical ingredient
APOC	African Program for Onchocerciasis Control
ASTMH	American Society for Tropical Medicine and Hygiene
BCC	Behavior change communication
CDD	Community drug distributor
CIFF	Children's Investment Fund Foundation, United Kingdom
CNTD	Centre for Neglected Tropical Diseases, Liverpool School of Tropical Medicine
COR-NTD	Coalition for Operational Research in NTDs
DC	District of Columbia
DEC	Diethylcarbamazine
DEC	Development Experience Clearinghouse
DfID	Department for International Development
DOLF	Death to Onchocerciasis and Lymphatic Filariasis
DRC	Democratic Republic of Congo
DSA	Disease specific assessment
DQA	Data quality assessment
ELISA	Enzyme-linked immunosorbent assay
EMRO	Eastern Mediterranean Regional Office
EPI	Expanded Program for Immunization
EU	Evaluation unit
FARA	Fixed Amount Reimbursement Agreement
FCT	Federal Capital Territory
FELTPs	Field Epidemiology and Laboratory Training Programs
FHI360	Family Health International
FLHFS	Front line Health Facility Staff
FTS	Filariasis Test Strip
FY	Fiscal year
GAELF	Global Alliance to Eliminate Lymphatic Filariasis
GET2020	Global Elimination of Blinding Trachoma by 2020
GIS	Geographic Information Systems
GNNTD	Global Network for NTDs
GTMP	Global Trachoma Mapping Project
HKI	Helen Keller International
HQ	Headquarters
ICT	Immunochromatographic test
ICTC	International Coalition for Trachoma Control
IEC	Information, education, communication
IMA	IMA World Health
IR	Intermediate result
ITI	International Trachoma Initiative
IU	Implementation unit

IVM	Ivermectin
JRSM	Joint-request for selected medicines
KAP	Knowledge, attitude, practices
LF	Lymphatic filariasis
LQAS	Lot Quality Assurance Sampling
M&E	Monitoring and evaluation
MBD	Mebendazole
MDA	Mass drug administration
MDP	Mectizan Donation Program
MMDP	Morbidity Management and Disability Prevention
MOH	Ministry of Health
NGDO	Non-governmental development organization
NGO	Non-governmental organization
NNN	NTD NGDO Network
NTD	Neglected tropical disease
NTD-SC	NTD Support Center
OR	Operational research
OV	Onchocerciasis
PAHO	Pan American Health Organization
PCR	Polymerase chain reaction
PC	Preventive chemotherapy
PDCI	Partnership for Disease Control Initiative
PIEE	Programmatic Initial Environmental Examination
PSSC II	USAID's Programme Santé Santé Communautaire II
PZQ	Praziquantel
QGIS	Quantum Geographic Information Systems
RPRG	Regional Program Review Group
SAC	School-aged children
SAE	Serious adverse events
SAFE	Surgery, Antibiotics, Facial cleanliness, Environmental improvements
SCH	Schistosomiasis
SCI	Schistosomiasis Control Initiative
SCORE	Schistosomiasis Consortium for Operational Research and Evaluation
SEARO	Southeast Asia Regional Office
SMS	Short message service
STAG	Strategic and Technical Advisory Group
STH	Soil-transmitted helminths
TA	Technical assistance
TAF	Technical Assistance Facility
TAS	Transmission assessment survey
TCC	The Carter Center
TEC	Trachoma Expert Committee
TEO	Tetracycline eye ointment
TF	Trachomatous inflammation-follicular
TFGH	Task Force for Global Health
TIPAC	Tool for Integrated Planning and Costing
TIS	Trachoma impact survey
TOT	Training of Trainers

TRA	Trachoma
TT	Trachomatous trichiasis
USAID	United States Agency for International Development
USD	United States Dollar
WG-CS	Working Group for Capacity Strengthening
WHO	World Health Organization
WPRO	Western Pacific Regional Office
WV	World Vision
ZTH	Zithromax

INTRODUCTION

The **U.S. Agency for International Development (USAID)’s ENVISION project (2011-2016)** is designed to support the vision of the World Health Organization (WHO) and its member states by targeting the control and elimination of seven neglected tropical diseases (NTDs) including, lymphatic filariasis (LF), onchocerciasis (OV), schistosomiasis (SCH), trachoma (TRA), and three soil-transmitted helminths (STH; roundworm, whipworm, hookworm). ENVISION’s goal is to strengthen NTD programming at global and country levels and support Ministries of Health (MOH) to achieve their NTD control and elimination goals.

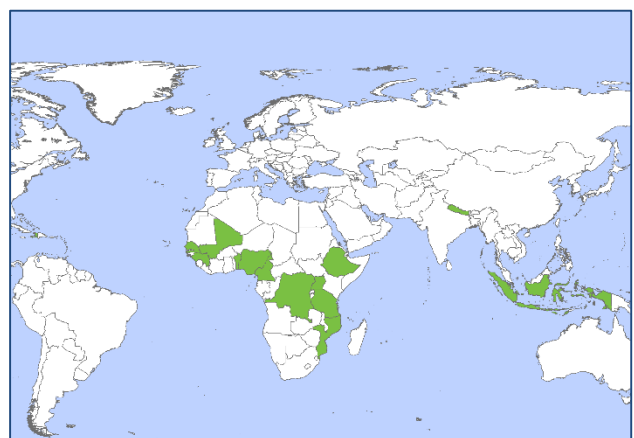
At global level, ENVISION –in close coordination and collaboration with WHO, USAID and other stakeholders- contributes to several technical areas in support of global NTD control and elimination goals, including:

- Drug and diagnostics procurement, where global donation programs are unavailable,
- Capacity strengthening,
- Management and implementation of ENVISION’s Technical Assistance Facility (TAF),
- Disease mapping,
- NTD policy and technical guideline development, and
- NTD monitoring and evaluation (M&E).

At the country level, ENVISION provides support to national NTD programs in 14 countries in Africa, Asia and Latin America (Figure 1) by providing strategic technical and financial assistance for a comprehensive package of NTD interventions, including:

- Strategic annual and multi-year planning
- Advocacy
- Social mobilization and health education
- Capacity strengthening
- Baseline disease mapping
- Preventive chemotherapy or mass drug administration (MDA)
- Drug and commodity supply management and procurement
- Program supervision
- M&E, including disease-specific assessments (DSA) and surveillance

Figure 1. Countries supported by ENVISION in FY14



Countries include: Benin, Cameroon, Democratic Republic of Congo, Ethiopia, Guinea, Haiti, Indonesia, Mali, Mozambique, Nepal, Nigeria, Senegal, Tanzania, and Uganda.

FY14 YEAR IN REVIEW

Executive Summary

The third year of the ENVISION project has been implemented in the midst of an evolving global NTD environment. New donors and funding streams are now available to national programs and their partners, as momentum towards reaching the 2020 NTD control and elimination goals builds. ENVISION's role as a global leader in this complex coordination environment is important; project results and lessons learned are influencing global discussions as established guidelines are unable to keep up with implementation and national programs' needs. In addition, when new guidelines are drafted, these "moving goal posts" affect programming as donors and partners work to ensure strategy and resources are aligned.

Following the celebration of USAID's 1 Billion and Counting Campaign this year, the ENVISION project and USAID's NTD portfolio are benefitting from and are challenged by higher visibility. It will continue to be important for the ENVISION project to maintain high quality regular programming while measuring impact. Routine monitoring and evaluation of project activities, including assessments of coverage and use of project results are influencing global-level discussions.

In the ENVISION project portfolio, each country's unique experience exemplifies the diversity of activities and status of national programs worldwide—some countries have completed all NTD mapping and are scaling-up MDA, while others are conducting mapping in some districts and assessing impact in others. This diversity of experience and status on the continuum toward NTD control and elimination are illustrated in the following report and in the accompanying annual country reports. Briefs for each of the 14 countries supported by ENVISION are provided below. Please see the country reports for more detailed analysis of FY14 activities.

BENIN

FY14 was a significant year for the national NTD control Program (PNLMT) and especially for the Ministry of Health in term of achievements. For many years, Benin has had difficulty in establishing reliable baseline data for STH, SCH, and trachoma. With only eight of Benin's total 77 communes mapped in 2013, ENVISION worked with the PNLMT to extend SCH/STH mapping to 30 other communes in 2014, increasing the mapping activity to almost 50% of the country and providing evidence for the PNLMT to expand the deworming programs in 38/77 communes. Another accomplishment was the mapping of trachoma, a NTD which had never been investigated in Benin. All 25 suspected communes were mapped, with data currently completed for 24 communes allowing the country to develop a suitable elimination strategy by end of 2015. Results from LF TAS post MDA surveillance in 23 communes conducted with funding and technical assistance from ENVISION have confirmed that the transmission of LF was actually stopped in all the 23 communes surveyed.

Also of note this year, TIPAC training that took place in June helped the National Program to prepare the WHO joint request form for drugs for FY15's activities. After a successful pilot with mobile phone provider MTN to explore use of mobile payments, RTI signed a contract with them to continue this relationship, expanding mobile payments in support of additional activities implemented by the national NTD program.

CAMEROON

The NTD Cameroon program continues to provide high quality MDA and conduct numerous DSAs in a single year, while steadily advancing toward control and elimination objectives for all five targeted NTDs. Results from trachoma impact assessments conducted in 7 districts this year indicate that MDA is no longer warranted at the district level. Additionally, pre-TAS and TAS surveys conducted to assess the progress toward stopping MDA criteria for LF also revealed that each evaluation unit passed the assessment. The 4 districts that conducted pre-TAS will conduct TAS in FY15 with ENVISION support, and the 5 districts that conducted TAS no longer require district-level treatment for LF.

Also in FY14, the national program initiated a new effort to generate additional support for CDDs in the Littoral region which resulted in the collection of \$12,000 by the local communities. The first NTD DQA in a Francophone African country was conducted this year in Cameroon.

DEMOCRATIC REPUBLIC OF CONGO

FY14 was a difficult year for the project in terms in launch activities in DRC. As a result, many of the year's planned activities did not take place. Extensive time and effort has been spent in determining the best way in which ENVISION and its partners can support the MSP and its NTD control and elimination program, which should translate to more progress in terms of implementation in FY15.

Despite these challenges, ENVISION did succeed in getting MSP officials involved in Global Trachoma Mapping Project (GTMP) trainings. As a result, DRC now has a certified grader trainer and a team of graders and recorders to support trachoma mapping in the country. With this, trachoma mapping has started and is ongoing in 3 provinces. In support of the LF program, field surveys were also conducted to inform the establishment of sentinel sites in Bandundu and Maniema provinces. Data analysis is ongoing.

ETHIOPIA

ENVISION launched in Ethiopia in FY14: a year that saw the completion of nation-wide mapping for LF, Trachoma, STH and SCH. The mapping results revealed the need for enormous expansion in NTD interventions in every region of Ethiopia. In order to assist the FMOH NTD team to implement and coordinate these interventions, ENVISION facilitated numerous capacity building activities and workshops including the WHO Integrated NTD program managers workshop and the National Trachoma Action Plan (TAP) revision. ENVISION also supported the first NTD annual review and NTD taskforce meetings in the country providing the FMOH, Regional Health Bureaus and NGDO partners a forum to discuss the challenges and success of the previous year and make a plan for the year ahead.

GUINEA

Despite the Ebola outbreak which continues in Guinea, ENVISION's work with the Ministry of Health and Public Hygiene (MSHP)'s National Program for Onchocerciasis and Blindness Control and Neglected Tropical Diseases (PNLOC/MTN) in Guinea resulted in several key achievements this year advancing the country's progress towards NTD control and elimination. Guinea completed baseline mapping of SCH-STH in the entire country with the completion of surveys in seven health districts (HDs) supported by ENVISION in FY14. Substantial progress was also made towards completing baseline mapping for trachoma. Only four HDs still need trachoma mapping and ENVISION will work with the PNLOC/MTN to

complete these once the Ebola situation permits (likely after FY15, as these HDs are located in the Forest region which is the epicenter of the outbreak). Regarding treatment, ENVISION assistance helped the country to implement its first-ever MDA for LF and to scale up trachoma MDA to eight of the nine endemic HDs, which is a remarkable achievement in terms of MDA scale-up. Epidemiological monitoring of OV also continued in FY14.

HAITI

In collaboration with the Ministry of Health and Population (MSPP) and the Ministry of Education (MENFP), significant progress has been made to reach the LF elimination goal through continual MDA treatment, capacity building of community volunteers as well as increased advocacy and social mobilization to bring awareness to NTDs. This year, ENVISION supported 91 communes to reach 6 rounds of consecutive MDA; it is expected that 75 implementation units will be eligible for Stop-MDA Transmission Assessment Surveys (TAS), pending the results of pre-TAS. As a result, much of FY14 involved gearing up the communities and training additional departmental lab technicians to conduct disease specific assessments (DSA). It is expected that FY15 will mark a significant decrease in the number of communes requiring treatment for LF and a steady movement towards elimination.

INDONESIA

ENVISION dedicated substantial efforts and time in the first two years to establish the necessary mechanisms that would enable the ENVISION project to provide support to the MOH and its NTD program. In FY14, ENVISION focused on quality – continuing to build capacity of the MOH and NGOs, thoroughly analyzing MOH program data, and improving reporting. The project worked closely with the MOH in training and implementation of two new M&E initiatives – use of the data quality assessment (DQA) tool and use of the integrated NTD database. These activities – along with a transmission assessment survey (TAS) training where proper use of the TAS eligibility and reporting form was demonstrated - were highly regarded by the MOH and led to quick changes in MDA data collection and reporting, and a more thorough review of historical data and readiness for TAS. Supervision of all activities (MDA, mapping, TAS) was increased through use of standardized supervisory checklists and increasing the number of trips of ENVISION staff, local consultants, and NGOs. As well as using the supervisory checklist results for immediate action, reporting on the cumulative results of the supervisory checklist at activity review meetings was useful in feeding the data back and understanding key challenges across districts.

Timely drug procurement remains an issue, but regular planning meetings with BinPhar and the MOH's agreement to use some donated DEC in 2014 and 2015 are helping solve it. The MOH's current LF goal is to have all districts conducting full coverage LF/STH MDA by 2018. While this means that LF MDA will not be stopped in all areas by 2020, it represents a feasible nationally-owned goal. Even though ENVISION financial support cannot cover all LF-endemic areas in FY15, given the potential new funding commitment by the Government of Indonesia, ENVISION will provide high-level support (strategy development using data reviewed in FY14, national/provincial planning) for the MOH to scale up LF/STH MDA and STH-only MDA, with an emphasis on building capacity of provincial staff to plan and monitor activities. And while STH-only MDA scale up has been slow, with an extra year needed to get district commitment before rolling out in each province, it is steadily increasing and STH coverage should reach 75% of School aged children (SAC) by 2020.

MALI

In FY14, after a year of USAID support being suspended, the Mali NTD program successfully transitioned from temporary END Fund support to USAID support provided through the ENVISION project. When USAID support resumed, the national program was implementing MDA, DSAs and LF morbidity management and disease prevention activities with END Fund support. Through a process of revisiting the security situation in the north and looking at gaps, HKI, RTI and USAID worked with the national program and partners to draft an FY14 work plan to address remaining needs of the program, most notably returning support for MDA to the northern regions of Mali.

In addition to the strides made in increasing MDA geographic coverage and continuing LF, OV, SCH and STH DSAs, Mali continues to receive support for the full SAFE strategy for trachoma through partnership with the Conrad N. Hilton Foundation. Mali remains one of West Africa's most advanced countries in reaching the elimination target for blinding trachoma, and has achieved impressive gains in reducing the surgical backlog, while also collecting data at the sub-district level for decision-making.

The accomplishments achieved by the Mali NTD program in FY14 are remarkable. Despite the challenges associated with transitioning from one funding source to another, implementing an ambitious calendar of activities, and recovering from large-scale socio-political upset, the program achieved tremendous strides in the NTD program throughout FY14.

MOZAMBIQUE

Trachoma mapping continued to be a priority activity this year with ENVISION coordinating closely with the Global Trachoma Mapping Project (GTMP) to complete nearly all trachoma mapping in Mozambique. Just 12 districts (Sofala Province) still need mapping and these will be addressed in FY15 by Light For the World (LFTW). The mapping has provided critical information for understanding the reality of the trachoma situation in Mozambique and helped in developing the National Ophthalmologic work plan, informing the scale-up of MDA and the scale-up of trichiasis surgeries, while also helping to improve coordination with the WASH sector. Several districts in two provinces received Zithromax treatment for the first time as part of MDA for trachoma which represents a substantial scale up in the number of districts treated from 10 in FY13 to 21 in FY14. The ENVISION project held a successful One Billion & Counting Campaign event with USAID which had a substantial turnout from the MoH, USAID, and key partners. The event showcased photos of ENVISION work globally. ENVISION has remained Chair of the Mozambican Eye Care Coalition (MECC) bringing together all key eye care specialists in the region to coordinate support to the MOH, especially in joining forces to eliminate trachoma by the year 2020. Relationships with the Ministry and other partners continues to strengthen which has helped to promote coordination among improved implementation of NTD activities.

Also this year, Mozambique was selected to receive funding from the Queen Elizabeth Diamond Jubilee Trust in support of trachoma elimination efforts. Activities will help reduce the backlog of TT surgeries and promote other components of the SAFE strategy. RTI will serve as the coordinating partner for this funding.

NEPAL

In 2014, ENVISION helped the Nepal NTD program to make significant progress in reaching LF and elimination goals. With funding from ENVISION, three districts received a final round of treatment for trachoma and two districts passed impact surveys (TIS). Nepal has now eliminated trachoma in 18 of 20

endemic districts, and expects to move to surveillance in 2015. The LF program has also made significant progress towards elimination, with 20 of the 61 endemic districts having eliminated the disease. In FY14, ENVISION provided partial funding for MDA in the 41 remaining endemic districts, and funded all MDA activities in 19 of those districts. In addition, ENVISION supported critical DSAs to determine the program's progress, including TAS I in 5 districts, pre-TAS sentinel site surveys in 10 districts, trachoma remapping surveys in 13 districts, and an STH national prevalence survey. These activities, planned and executed in close coordination with the national program, are helping Nepal reach its goals of LF and trachoma elimination and STH control.

NIGERIA

In FY14, ENVISION had numerous successes both through MDA implementation and capacity building efforts at the federal, zonal, state and LGA levels. With ENVISION support, Nigeria was the first country to implement both the WHO integrated NTD program manager's training and the WHO Integrated NTD Database. Additionally, the successful implementation of the Data Quality Assessment as well as ENVISION's support of national decision-making bodies such as the National Steering Committee have empowered the FMOH to make evidence-based decisions to guide and improve upon its national NTD program.

As part of ENVISION, The Carter Center (TCC) began an unprecedented scale-up of NTD program activities in support of the Federal Ministry of Health (FMOH), 9 State Ministries of Health and local government administrations (LGAs). Through TCC, ENVISION supported over 11 million LF treatments in Southeast Nigeria along with over 6 million onchocerciasis treatments throughout the nine states. The ENVISION project also began treatments for STH in children in the seven states coupled with expanded SCH programs in four states. Treatments are complemented by a training program for teachers – the FMOH NTD programs' newest category of community drug distributors (CDDs). Together with the Nigerian Ministry of Health, these treatments are making a difference in the lives of millions in one of the world's most ambitious and successful integrated NTD programs.

SENEGAL

Senegal continued to make good progress this year toward its national control and elimination goals for PC-NTDs. USAID/Senegal's project PSSC II supported MDA for LF in 6 districts, SCH in 53 districts, and STH in 76 districts; MDA for OV, anticipated in 10 districts, was canceled to allow the OV impact survey to take place. Sightsavers, with non-USAID funds, supported MDA for trachoma in a total of 12 districts (the final three districts are ongoing as of 11 November 2014), using tetracycline eye ointment provided by ENVISION for treatment of pregnant women and children under 6 months of age. With assistance from ENVISION, the MOH completed baseline mapping for trachoma in 14 districts (with the country's final three districts to be completed in early FY15) and trachoma impact surveys in five districts; the mapping found <10% TF prevalence among 1-9 year olds in all districts, and the first two of the impact surveys found 5-9.9% TF prevalence among 1-9 year olds of (the results from the other three surveys are forthcoming). ENVISION also supported the MOH in conducting OV epidemiological and entomological impact surveys in six districts each (the entomological component is continuing into FY15 for the optimal fly-catching period). RTI connected the MOH to additional NTD expertise (tools and trainings) provided through the Global Trachoma Mapping Project (GTMP), TFGH, CDC, and APOC at no cost to the project or the MOH.

ENVISION also played a key role in strengthening M&E for PC-NTDs, by training the MOH, ChildFund, and USAID/Senegal on USAID's NTD M&E system coordinating the completion, review, submission, and

responses to feedback on the M&E Workbooks with the MOH, ChildFund, and USAID/Senegal; and leading a data quality assessment in two regions accompanied by the MOH and ChildFund. ENVISION's Resident Program Advisor, strategically embedded within the MOH offices, participated in the MOH's management and planning discussions, and jointly supervised field activities supported by other partners when appropriate and feasible.

TANZANIA

ENVISION helped the TZNTDCP to make significant progress this year towards reaching elimination and control goals. In 9 regions, the TZNTDCP conducted its first school-based MDA to treat school-aged children with a second round of ALB and a round of PZQ where appropriate. The TZNTDCP field-tested the new Data Quality Assessment (DQA) tool and gained important insights as to ways in which it can improve data collection and reporting. Pre-TAS was carried out in 24 districts and 12 midterm LF assessments were conducted; preliminary results show transmission has been interrupted in most districts.

Great strides were made in trachoma with all mapping having been completed by the end of FY14. Trachoma impact assessments (TIS) were carried out in 19 districts. ENVISION has supported the TZNTDCP to develop a better road map for trachoma elimination with the Trachoma Action Plan (TAP), though the document has not yet been finalized.

UGANDA

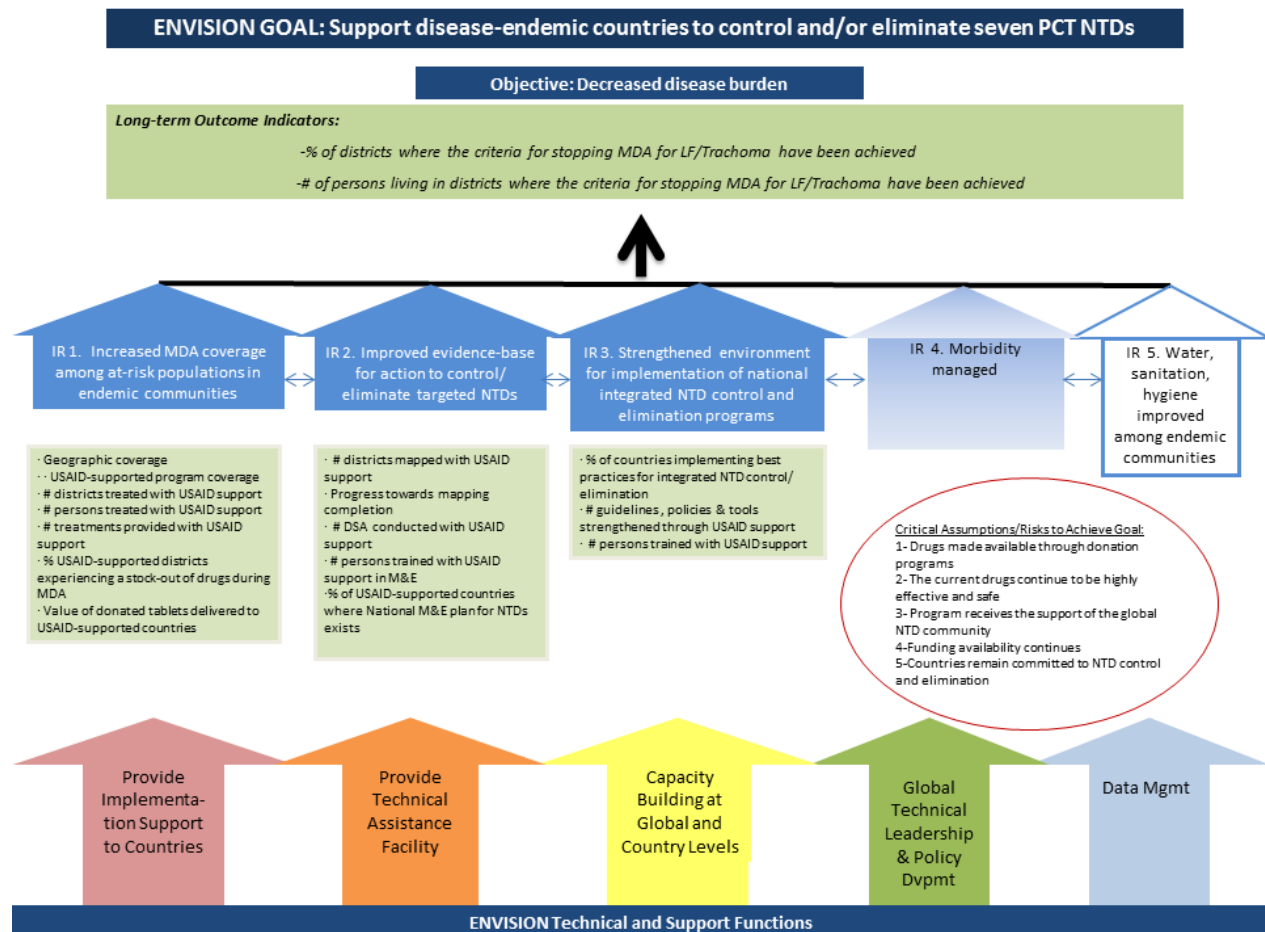
The Uganda NTD Control Program has made tremendous strides towards the control and elimination of the 5 targeted PCT NTDs. The project continued to work with the national program to complete trachoma mapping in the last remaining 6 districts, thus completing the epidemiological map for Uganda. In those districts having implemented MDA for many years already, assessments conducted by ENVISION show a significant reduction in disease prevalence and burden. It is estimated that by end of next year, the majority of LF and trachoma districts will have evidence needed for stopping MDA and proceed to surveillance phase, thus elevating the urgency for proper guidance from WHO and other relevant agencies for an exit strategy.

Working as part of the ENVISION project, The Carter Center, in partnership with the Ministry of Health has achieved significant progress toward the goal of eliminating river blindness in Uganda by 2020. A total of 1,824,344 treatments (about 94% of the targeted) were attained. The Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEAC) meeting in August 2013 recommended stopping interventions in two foci and launching semi-annual treatments in two other foci where transmission was continuing. As a result of the disease elimination efforts in affected communities, technical and political leaders are aware of the target for onchocerciasis elimination and are motivated to interrupt transmission in their respective areas before 2020. The Carter Center's River Blindness Elimination Program celebrated its 200 millionth mass treatment of Mectizan®, which has been generously donated by Merck. Uganda was chosen as the site of the program's 200 millionth treatment, given the high level of success the national program has enjoyed. In total, at least 2.18 million Ugandans are no longer at risk of onchocerciasis. Uganda has eliminated, interrupted, or is close to interruption of transmission of onchocerciasis in 15 out of 17 foci, and the country is close to its objective of elimination of onchocerciasis by 2020.

ENVISION Project Framework

Based on the WHO NTD roll-out package¹ and the accomplishments from the earlier USAID-funded NTD Control Program (2006-2012), RTI and USAID designed the ENVISION project with the goal of supporting disease-endemic countries to control or eliminate seven NTDs. Through a package of technical and support functions, ENVISION aims to empower governments of endemic countries to lead national NTD control programs and scale up the delivery of preventive chemotherapy for the USAID-targeted NTDs.

Figure 2: ENVISION Monitoring and Evaluation Framework



The ENVISION M&E Framework graphic (Figure 2) illustrates the results framework through which project activities are designed, implemented, monitored, and evaluated. ENVISION technical and support functions include: 1) implementation support to countries; 2) technical assistance (TA) for national NTD programs; 3) capacity building at global and country levels; 4) global technical leadership

¹ Hanson, C., Weaver, A., Zoerhoff, KL., Kabore, A., Linehan, M., Doherty, A., Engels, D., Savioli, L., Ottesen, EA. Integrated Implementation of Programs Targeting Neglected Tropical Diseases through Preventive Chemotherapy: Identifying Best Practices to Roll Out Programs at National Scale. American Journal of Tropical Medicine and Hygiene. 86 (3). 2012. 508-513.

and policy development, and; 5) data management. These functions are designed to support activities aiming at the agreed ENVISION Intermediate Result (IR) domains:

IR 1) increased MDA coverage among at-risk populations in endemic communities;

IR 2) improved evidence base for determining and assessing action to control/eliminate targeted NTDs;

IR 3) strengthened strategic approach and guidelines for implementing national integrated NTD control and elimination programs

In order to achieve ENVISION's goal to strengthen NTD control at global and country ENVISION engages with local, regional, and international stakeholders to provide technical assistance and build capacity, ensuring that standard tools (such as the Integrated NTD Database), techniques and state-of-the-art approaches (such as data quality assessments) are used effectively. By influencing global policies and building local capacities and systems, ENVISION aims to foster efficient and sustained integrated NTD control beyond the life of the project.

Several critical assumptions are considered during ENVISION project work planning and implementation, including the continued availability of safe and effective donated drugs, the support of the global NTD community, the timing and availability of project funding, and the commitment and leadership of national NTD programs of endemic country governments. These assumptions speak to the importance of the project's reputation and leadership throughout the NTD community and are continuously monitored by project management. The project also faces the risk of not reaching its targets due to political instability (e.g., as experienced in Mali during 2013/2014) and of disease outbreaks that affect national health care systems and communities' relationships with those systems (e.g., Ebola outbreak in West Africa in 2014 affecting ENVISION programming in several countries, specifically Guinea).

Continuum of Progress towards NTD Elimination and Control

The 14 countries supported by ENVISION are at various stages in progress towards NTD control and elimination (Table 1). The ENVISION project supports multiple years of effective MDA at high coverage in anticipation of achievements by 2016 that will position national programs for the final phases of LF and trachoma elimination and the achievement of oncho, SCH and STH control². It is important to note that while USAID-supported areas of a particular country may be eligible for validation, WHO will likely confirm validation of elimination at the national level only. For this reason, ENVISION supports advocacy and develops partnerships to support national programs in filling programmatic gaps.

² These elimination and control targets are described to be in line with USAID's defined goals.

Table 1. Projected Progress to NTD Elimination and Control in ENVISION-supported areas of ENVISION-supported countries					
Phase 1	Mapping and situation analysis of disease; capacity building to conduct MDA				
Phase 2	Any MDA, whether in scale-up or successive years of MDA at national coverage				
Phase 3	Any disease specific assessment, some districts qualified to stop MDA				
Phase 4	Post-endemic surveillance				
Validation	Country is eligible to apply for WHO dossier validating elimination of disease, reaching global targets				
Country	Disease	2014	2016	2018	2020
Benin	LF	2,3	2,3	3	4
	Trachoma	1	2	2	3
Cameroon	LF	2,3	2,3	3	4
	Trachoma	2,3	2,3	3,4	4
Democratic Republic of Congo (DRC)	LF	1	2	2	2,3
	Trachoma	1	2	2	2,3
Ethiopia	LF	2	2	2	3,4
	Trachoma	1	2	2,3,4	3,4
Guinea	LF	1,2	2	2	3
	Trachoma	1,2	2	2,3	3
Haiti	LF	2,3	2,3	4	4/ Validation
	Trachoma	N/A			
Indonesia	LF	2	2,3	3,4	4
	Trachoma	N/A			
Mali	LF	2,3	2,3, 4	3, 4	4
	Trachoma	2,3, 4	3,4	4	Validation
Mozambique	LF	2	2,3	4	Validation
	Trachoma	1,2	2	3	4/Validation
Nepal	LF	2,3	2,3	3,4	4/Validation
	Trachoma	2,3	4	Validation	Validation
Nigeria	LF	1,2,3	2,3,4	2,3,4	3,4
	Trachoma	2,3	4	4	4
Senegal	LF	3	3,4	4	4
	Trachoma	1,3	3	4	4
Tanzania	LF	1,2	2,3	2,3,4	4/Validation
	Trachoma	1,2,3,4	2,3,4	2,3,4	3,4
Uganda	LF	2,3	3	Validation	
	Trachoma	1,2,3	2,3	3	Validation

As mentioned earlier, USAID funding through ENVISION cannot address all programmatic funding needs for these countries to ensure their progress along the continuum. Indeed, key NTD program activities around morbidity management, provision of water and sanitation, and operational research (OR) are not within ENVISION's remit and are not supported. Where possible, however, ENVISION collaborates with donors and partners to help national programs prioritize activities and interventions, and to encourage new donors and partners to fill gaps. Examples of this strategy include: RTI's interaction with the End Fund leading to continued funding of the Mali NTD program during of the country's political instability in 2013 and 2014 when USAID support was suspended; collaboration with the Fred Hollows Foundation in Ethiopia ensuring implementation of the full SAFE (Surgery, Antibiotics, Facial cleanliness,

Environmental improvements) strategy in areas where ENVISION supports MDA, and; proposed collaboration around advocacy for NTD programming in Nigeria with the Global Network for NTDs (GNNTD). Similarly, in Senegal, while relatively little funding is provided by ENVISION to NTD programming, RTI is one of the technical and strategic leads in the country, encouraging the MOH to target control and elimination and harmonizing efforts amongst all NTD implementing partners.

PROJECT MANAGEMENT

Staffing

ENVISION has 25 full-time equivalent RTI headquarters staff and 1 team member based regionally. It is led by a management team of Eric Ottesen (Project Director), Lisa Rotondo (Deputy Technical Director), Amy Doherty (Deputy Director Operations), and Achille Kabore (Senior NTD Advisor). ENVISION leadership meets monthly and communicates regularly with staff to ensure project technical and operations oversight.

Country	Technical Focal Point	Operations Focal Point	M&E Focal Point
Benin	Jean Jacques Tougoue	Cheri Brown	Hannah Frawley
Cameroon	Jean Jacques Tougoue	Ruth Yohannes	Russell Owen
DRC	Jean Jacques Tougoue	Josh Sidwell	Russell Owen
Ethiopia	Scott McPherson	Julie Abella	Hannah Frawley
Guinea	Daniel Cohn	Ruth Yohannes	Russell Owen
Haiti	Katie Crowley	Cheri Brown	Kalpana Bhandari
Indonesia	Molly Brady	Ruth Yohannes	Kalpana Bhandari
Mali	Alexis Serna	Ruth Yohannes	Russell Owen
Mozambique	Philip Downs	Josh Sidwell	Hannah Frawley
Nepal	Katie Crowley	Margaret Davide-Smith	Kalpana Bhandari
Nigeria	Scott McPherson	Josh Sidwell	Kalpana Bhandari
Senegal	Daniel Cohn	Josh Sidwell	Russell Owen
Tanzania	Katie Crowley	Cheri Brown	Kalpana Bhandari
Uganda	Alexis Serna	Margaret Davide-Smith	Hannah Frawley

ENVISION programmatic activities at country level are supported by a US-based country team composed of a technical, operations, and M&E focal point (Table 2). The technical staff (M. Brady, K. Crowley, D. Cohn, P. Downs, S. McPherson, A. Serna, J. Tougoue) and operations staff (J. Abella, C. Brown, M. Davide-Smith, A. Fletcher, C. Massey, K. Robinson, J. Sidwell, T. Waterfield, R. Yohannes) work in teams

to support work planning and budgeting, as well as supporting country-level program implementation and to monitor activity progress and spending. The headquarters (HQ)-based M&E team is led by Katie Zoerhoff. Its members (K. Bhandari, H. Frawley, R. Owen) plan and implement M&E activities and ensure that ENVISION and USAID NTD data are of high quality, are up-to-date, and are accessible for sharing, with MOH consent. ENVISION's HQ-based communications staff (L. Cane, J. Leopold) gather information about program activities and achievements, and produce communications materials and messages for multiple audiences, including USAID, MOHs, the global NTD community, and the general public. ENVISION partner staff and all other field staff are detailed in the FY15 country work plans

Partner Coordination

ENVISION is implemented by RTI International in partnership with CBM International, The Carter Center (TCC), Helen Keller International (HKI), IMA World Health (IMA), Sightsavers, Light for the World, and World Vision (WV). Multiple ENVISION-supported countries are being implemented by a consortium of ENVISION partners (Ethiopia, DRC, Uganda, Nigeria), with regular partner coordination crucial to ensure programmatic success (Table 3). RTI hosted the **Annual ENVISION Partners Meeting** in Washington DC on February 4, 2014.

In addition to the 7 core ENVISION implementers, other organizations that are not directly funded by the project are key collaborative in-country partners. It should be noted that partner coordination is particularly crucial in Senegal where ENVISION provides significant technical and logistical support to USAID Senegal in the implementation of the Fixed Amount Reimbursement Agreement (FARA) and Programme Santé Santé Communautaire (PSSC) II

projects' NTD components. This includes, but is not limited to, liaising with the MOH, sharing language from work plan narratives, and technical review and input to the partner projects' M&E workbooks. In Haiti, ENVISION's leadership in coordinating partners (University of Notre Dame, Centers for Disease Control and Prevention) ensures that gaps in funding for the national program are filled as quickly as possible. Partner coordination in several countries (e.g., Mozambique, Tanzania, Nigeria, etc.) ensures that efforts are not duplicated, with, for example, United Kingdom Department for International Development (DfID)-funded partners and that the MOH is fully supported to reach its annual and long-term NTD program goals.

Global-level coordination in FY14 is demonstrated by a visit of ENVISION M&E staff to meet with the International Trachoma Initiative (ITI) and share ENVISION's experiences on the integrated NTD

Table 3. ENVISION Partner Support by Country

Country	ENVISION Partner
Benin	RTI International
Cameroon	Helen Keller International
Guinea	Helen Keller International
DRC	RTI International, IMA World Health, World Vision
Ethiopia	RTI International, Light for the World
Haiti	IMA World Health
Indonesia	RTI International
Mali	Helen Keller International
Mozambique	RTI International, Light for the World
Nepal	RTI International
Nigeria	RTI International, The Carter Center
Senegal	RTI International
Tanzania	IMA World Health
Uganda	RTI International, The Carter Center

database development. The meeting familiarized ITI staff with trachoma tools and indicators that RTI has used or developed and ways to make ITI tools and NTD tools and systems interface more easily. During the meeting, RTI and ITI discussed USAID's data collection tools, reporting requirements, and Integrated NTD Database. The meeting helped the partners better understand each other's data management and reporting needs as well identify overlaps of indicators, reports, and definitions. The progress made by the ENVISION's M&E system is recognized by and is being used to influence ITI's M&E system. In the long run, the continued collaboration is expected to support Ministries of Health to strengthen their data management processes and streamline the data reporting needs.

To strengthen the overall USAID NTD portfolio and reduce duplication of efforts, RTI and ENVISION partners liaise regularly with other recipients of USAID NTD funding. This applies particularly to the END in Africa and END in Asia projects managed by Family Health International (FHI360), as well as USAID-supported NTD work through the African Program for Onchocerciasis Control (APOC) and the Task Force for Global Health's NTD Support Center.

Through participation in multiple WHO NTD Working Groups, other technical and advocacy groups, and global NTD meetings, ENVISION staff engage regularly with WHO bodies and offices as well as other NTD stakeholders. Coordination continued with DfID-funded NTD partners (e.g., Liverpool School of Tropical Medicine Centre for Neglected Tropical Diseases (CNTD), Schistosomiasis Control Initiative (SCI), APOC, GTMP, Sightsavers) by taking advantage of existing global-level NTD gatherings such as the Annual Meeting of the American Society for Tropical Medicine and Hygiene (ASTMH) or the NTD Non-governmental development organization (NGDO) Network meetings. ENVISION staff participated in regular meetings of the major drug donation review bodies (e.g., Trachoma Expert Committee (TEC), Mectizan Expert Committee), facilitating coordination of the medicines and funding for NTD programming, and ensuring long-term drug forecasting is in line with country-level programming plans aiming for 2020 elimination goals. As part of global leadership and advocacy, ENVISION staff also engaged with NTD stakeholders and funders, including the END Fund, Geneva Global, Queen Elizabeth Diamond Jubilee Trust, TOMS, the GNNTD, and the Bill and Melinda Gates Foundation (BMGF), among others. This coordination encompasses activities such as advocacy, disease mapping, and MDA.

Communications

RTI continued to expand its discussion on NTD control and elimination on **social media**, providing real time updates of important country program activities supported by ENVISION and bringing attention to critical issues facing NTD control programs. @RTIfightsNTDs now has more than 600 followers (individuals and institutions), growing from 236 followers in the previous year, and has put out over 1,600 tweets on NTD activities in countries supported by the ENVISION project.

The **ASTMH Annual Meeting** was held in Washington D.C. in November 2013. Two symposia, (organized by RTI) and six abstracts were accepted and presented by ENVISION project staff at the annual meeting. Due to the very positive response and interest of Dr. Uche Amazigo's presentation on women and NTDs at ASTMH, RTI organized a **Twitter Chat on Women and NTDs** to coincide with International Women's Day, observed on March 7, 2014. Several individuals and organizations working in NTDs participated,

discussing how to improve participation of women and girls in MDAs, how gender affects participation and one's ability to contribute as a drug distributor, as well as how blindness and conditions like lymphedema affect women.

To promote **online media coverage of USAID's work in NTDs**, RTI staffed worked with Sightsavers to publish two articles highlighting the unique partnership between USAID, DFID and their partners on NTD control this year. In October 2013, The Guardian posted an article on our collaboration to complete trachoma mapping in Mozambique (<http://www.theguardian.com/global-development-professionals-network/2013/oct/15/trachoma-blinding-disease-usaid>) and in August 2014, the Global Network for NTDs published an article on how the ENVISION project coordinates closely with DFID's UNITED project in Nigeria (<http://endtheneglect.org/2014/08/going-beyond-cooperation-why-its-critical-for-ntd-control-and-elimination-in-nigeria/>).

RTI posted articles to the ENVISION website providing updates from the field offices and the technical team. These news items were also promoted and disseminated through social media. Additionally, RTI produced **two video tutorials** to support roll-out and use of two NTD tools supported by ENVISION – the TIPAC and the LINKs system for mhealth for data collection.

Based on information from Google Analytics, page views on the website range from 126-810 per week, totaling over 22,000 views during the year.

RTI's ENVISION Communications Manager was nominated to serve as **Co-Chair for the Advocacy and Communications Working Group of the International Coalition for Trachoma Control (ICTC)**. This support enabled the publication of the 10th Anniversary Tri-fold for the ICTC helping the organization to more effectively communicate its mission and advocate for the elimination of blinding trachoma. The involvement of ENVISION staff in this development process also resulted in USAID support for trachoma control being appropriately featured in the report.

This year, the communications team also began working with the M&E team to promote data use through visualization, tapping into RTI in-house capabilities in GIS mapping and data science. Initial activities included the development of the **NTD Dashboard prototype** for USAID to consider and the generation of program coverage maps for FY13 MDA which helped to support country team discussions with MOH on MDA coverage.

RTI posted semi-annual reports, technical reports, tools, and video to **USAID's Development Experience Clearinghouse (DEC)**, its online resource for USAID-funded technical and program documentation.

Celebrating USAID's One Billionth Campaign

In May 2014, USAID officially launched its "One Billion and Counting" campaign highlighting the success of USAID's Neglected Tropical Disease Control Program in Haiti with a visit from USAID Assistant Administrator for Global Health, Dr. Ariel Pablos-Méndez to observe MDA at a school in Saint-Louis-du-Sud. IMA World Health, ENVISION's implementing partner in Haiti worked closely with RTI and the

USAID team in Washington DC and Port-au-Prince to organize the event and support much of the logistics. It was a great success with participation from the First Lady of Haiti and ceremonies to recognize two unsung heroes for NTD control and elimination in Haiti.

Nearly the entire ENVISION team, HQ and field offices, helped USAID to develop country factsheets, coordinate with national NTD programs to nominate unsung heroes, write press releases and organize in-country events as part of the “One Billion and Counting” campaign. In total, eight ENVISION countries contributed in some way to USAID’s global campaign during this fiscal year, with activities in Mali, Nigeria and Tanzania expected in early FY15. As highlights, Mozambique held a Photo Gallery at the American Cultural Center in Maputo featuring USAID’s NTD Program work globally and in Mozambique. Benin, Indonesia and Nepal recognized unsung heroes as part of NTD stakeholders meetings that included participation of USAID mission and/or US embassy personnel.

SUPPORT FOR COUNTRY IMPLEMENTATION

ENVISION implemented in fourteen core project countries (see Table 3 above). Partner support was determined by geographic presence, technical expertise, and through a consultative process with USAID headquarters and field offices. This section provides a summary of activities across the project in support of disease mapping, mass drug administration (MDA), disease specific assessments (DSA), surveillance, procurement, and cost share. Please refer to the FY14 Country Annual Reports for more detail.

Disease Mapping (ENVISION-supported countries only)

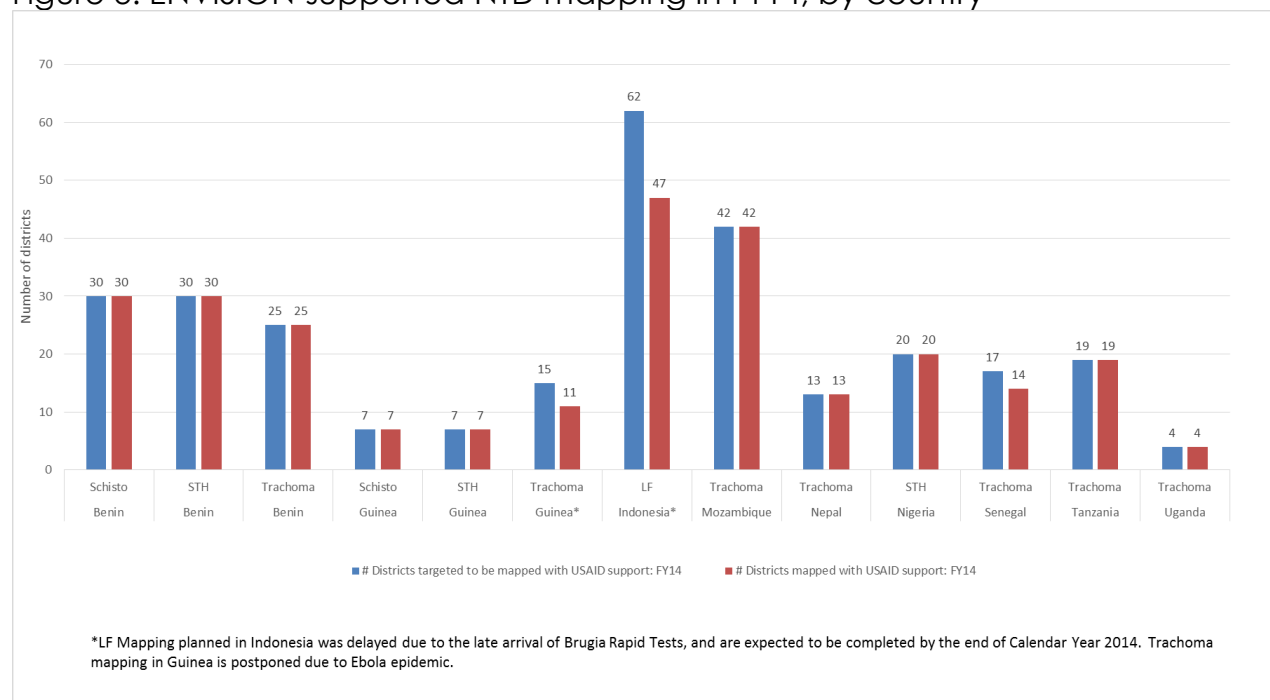
Completing the NTD epidemiological map is a critical milestone for USAID-supported countries in working towards NTD control and elimination goals. Therefore, targeted baseline prevalence mapping is a priority activity for ENVISION country teams when working with national NTD programs. ENVISION's strategy for helping countries achieve their mapping targets includes providing expertise and support to:

1. Determine the geographic areas to be mapped;
2. Identify best mapping protocol and methodology to use;
3. Train NTD program staff in disease mapping and provide necessary tools and diagnostics;
4. Provide technical and financial support for mapping suspected areas, use of mobile technologies for data collection, and data analysis and interpretation.

Nearly all disease mapping planned for FY14 with ENVISION support was conducted with the exception of Guinea where only 11 of 15 districts were mapped for trachoma and only 47 of 62 districts were mapped for LF in Indonesia, see Table 4 and Figure 3. LF Mapping planned in Indonesia was delayed due to the late arrival of Brugia Rapid Tests, and is expected to be completed by the end of 2014 calendar year. Trachoma mapping in Guinea was postponed due to Ebola epidemic. In Senegal, trachoma mapping was postponed in three districts due to the limited number of mapping teams available and the inaccessibility of the targeted districts during the June-September rainy season.

Table 4. NTD mapping supported by ENVISION in FY14, by disease		
NTD mapped	# districts targeted	# districts mapped
LF	62	47
SCH	37	37
STH	57	57
Trachoma	135	128
TOTAL	288	269
See FY14 Country Reports for more detail and/or explanation.		

Figure 3. ENVISION-supported NTD mapping in FY14, by country



With technical and financial assistance for NTD mapping in FY14, many more ENVISION-supported countries have reached or are approaching this critical milestone of completing all needed baseline mapping. See Table 5 for an overview of mapping status by country. Also in this section is discussion of the challenges some countries face in “officially” declaring “mapping completed.”

Table 5. Mapping status of ENVISION-supported countries

	# Districts Mapped with ENVISION support in FY14					Current Mapping Status
Country	LF	Oncho	SCH	STH	TRA	
Benin			30	30	25	In FY15, 39 evaluation units (EUs) will be mapped for SCH/STH; 1 EU to be re-mapped for trachoma. After which, mapping will be complete.
Guinea			7	7	11	Trachoma mapping is still needed in 4 districts. All other disease mapping completed
Indonesia	47					43 districts still need LF mapping. ENVISION will map 39 districts; remaining 4 districts to be targeted by GoI by end of FY'15. All other disease mapping completed.
Mozambique					42	In FY15, DfID funding will support completion of trachoma mapping in 12 districts in Sofala Province through LFTW. APOC will support Oncho hypo-endemic delineation mapping in Niassa Province. All other disease mapping completed.
Senegal					14	In FY15, ENVISION will support trachoma mapping in 3 districts to complete all mapping in Senegal.
Tanzania					19	56 districts that were mapped for LF before 2004 have not yet started treatment for LF. It appears that LF mapping data in these districts are out of date and new information will be needed before expanding LF treatment.
Uganda					4	Mapping completed.
Cameroon	Mapping completed					
Ethiopia	Although disease mapping is considered completed, results of recent SCH/STH and LF prevalence mapping are not yet available for all districts. APOC has pledged to support hypo-endemic delineation mapping in 30 woredas.					
Haiti	Mapping completed					
Mali	Security in the Northern Region is a barrier to completing SCH/STH assessments in 4 districts planned for FY'16.					
Nepal	Mapping completed. Urban disease mapping might be considered in certain situations.					
Nigeria	Mapping completed.					
See FY14 Country Reports for more detail and/or explanation. N.B. Some countries were known to be non-endemic for certain NTDs (i.e., oncho in Nepal) and thus mapping was never needed. "Mapping completed" indicates completion of mapping where mapping was indicated due to known presence of disease.						

Addressing Challenges to Mapping: ENVISION's Strategy

Where countries face challenges to completing baseline prevalence mapping, ENVISION has been working with national NTD programs to try and address them. These challenges are summarized below.

- Redistricting in Indonesia and Uganda has forced national programs to determine how to apply mapping data from "mother" to "daughter" districts. Areas may need to be remapped if evidence suggests that the new daughter district has a concentration of highly endemic communities, or is ecologically different from the mother district.
- Retrospective analysis and review of earlier baseline prevalence mapping has raised concerns in DRC and Tanzania, in particular, that districts determined to be below the MDA threshold should in fact be remapped to validate the original data. ENVISION helped to review historical mapping data in relation to currently known clinical manifestations and intervention coverage.
- A transition from disease control to an elimination strategy for oncho in certain African countries has demanded a reassessment of treatment strategies. In order to achieve oncho

elimination, the prevalence of oncho in hypo-endemic areas needs to be reassessed through *delineation mapping* to determine appropriate transmission zones and treatment strategies. This year, ENVISION worked with national NTD programs in Ethiopia and Mozambique to determine how this affects their baseline mapping needs and plans for MDA.

- Insecurity in parts of Mali and the Ebola outbreak in Guinea prevented mapping from taking place. HKI and RTI continue to monitor the situation with USAID. When security is assured, the project and partners will continue to support mapping as appropriate.
- The sole manufacturer of *Brugia* rapid tests used in Indonesia to complete LF mapping has not been able to support production of tests. ENVISION will continue to monitor the situation and work with WHO and partner organizations to find an expedited solution to this unique problem.

Partner Coordination in Mapping

Among the major implementing and coordinating partners supporting NTD control and elimination, ENVISION continues to play a lead coordinating role to ensure that gaps in mapping are being adequately funded, whether through USAID funding, or other funding, or a combination of several sources. The coordinating role of ENVISION among implementing partner organizations is quickly expanding with the push and momentum to complete this crucial early stage of NTD programs to continue on the continuum to elimination.

Table 6. ENVISION Partner Coordination on Mapping	
Donor/Collaborator	Description of Coordination with ENVISION
APOC	ENVISION support for MOH field teams in DRC and Mozambique is done in coordination with technical support from APOC to complete oncho delineation mapping.
BMGF	The BMGF funds NTD mapping through the Task Force for Global Health (TFGH) NTD Support Center (NTD-SC), including coordination support for WHO Africa Regional Office (AFRO). ENVISION benefits from close coordination with NTD-SC and is thus able to coordinate the supported mapping efforts.
Children's Investment Fund Foundation (CIFF)	In Ethiopia and Nigeria ENVISION works with CIFF to ensure coordination of mapping plans. Any gaps identified are put forward to potential funders.
DfID/GTMP	See GTMP Section under Global Mapping Initiative

District-level maps showing any remaining gaps in mapping are provided as part of the FY14 country reports. *Note: "Mapping gap" maps are based on FY15 planned activities to provide the most up-to-date reflection of coverage and gaps remaining as the project starts FY15.*

Mass Drug Administration

In FY14, ENVISION supported MDA in 12 countries which includes provision of assistance for strategic planning, advocacy, social mobilization, cascaded training, drug distribution, supervision, drug logistics, and M&E. Across all national NTD programs supported by ENVISION, 38.2 million people were treated with 73.5 million treatments in FY14. Table 7 provides an overview of MDA results in FY14 by country, however, for many countries, it was not possible to compile all FY14 MDA data at the time of this report. As a result, the overall % of districts treated vs. targeted in FY14 appears low, particularly since ENVISION could not include any results from Ethiopia or Nigeria at the time of this report.

Table 7. ENVISION support for MDA in FY14

Country	# of districts treated	% of targeted districts that were treated	# of persons treated	% of persons targeted that were treated	# treatments provided
Benin	68	100%	3,768,758	98%	5,112,982
Cameroon*	74	41%	2,108,463	15%	4,054,311
Ethiopia	0	0% (60 targeted)	0	0%	0
Guinea	11	50%	2,837,187	48%	4,547,653
Haiti	97	100%	5,159,277	87%	10,318,554
Indonesia*	1	3%	122,499	1%	244,998
Mali	11	73%	882,831	59%	2,549,369
Mozambique	21	100%	1,636,228	74%	1,636,228
Nepal	41	100%	10,933,596	74%	22,443,259
Nigeria*	0	0% (147 targeted)	0	0%	0
Tanzania*	53	98%	2,415,168	21%	2,883,122
Uganda*	58	73%	8,319,744	49%	19,709,299
ENVISION Total	435	52%	38,183,751	33%	73,499,775

Footnotes:

See FY14 Country Reports for more detail and/or explanation.

*Data being compiled or not yet available

**Targets reflect expected population to be treated and may not represent entire eligible population. Targets reflect what was submitted to USAID in project work plan; as country work plans were refined, targets were refined.

Table 8 provides information on MDA treatments by sex, for those districts reporting sex-disaggregated data.

Table 8. Females treated in MDAs supported by ENVISION in FY14

Includes only data reported at the time of this report, where sex-disaggregated data are available.

Country	Disease	Total # Persons treated	% female
Benin	LF	1,273,314	53%
	Oncho	2,917,252	52%
	Schisto	449,991	48%
	STH**	449,991	48%
Cameroon*	LF	104,191	50%
	Oncho	104,191	50%
	Schisto	1,690,519	42%
	STH	2,088,678	44%
Guinea	LF	956,726	53%
	Oncho	956,726	53%
	STH	639,425	53%
	Trachoma	1,994,776	53%
Haiti	LF	5,159,277	51%
	STH	5,159,277	51%
Indonesia*	LF	122,499	49%
	STH	122,499	49%
Mali	LF	878,154	51%
	Oncho	239,661	52%
	Schisto	553,400	54%
	STH	878,154	51%
Mozambique	Trachoma	1,636,228	55%
Nepal	LF	10,933,596	51%
	STH	10,933,596	51%
	Trachoma	576,067	54%
Tanzania*	Schisto	467,954	52%
	STH**	2,415,168	51%
Uganda*	LF	5,134,749	52%

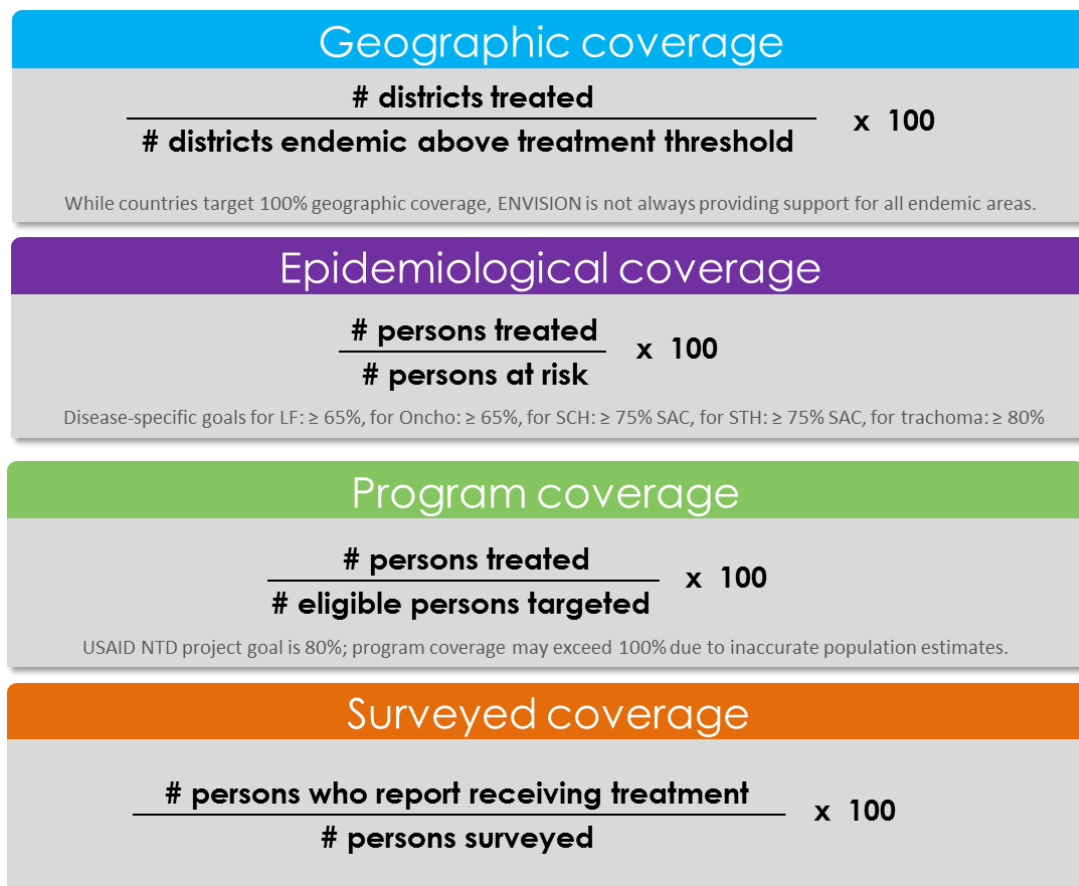
*Data being compiled or not yet available.

See FY14 Country Reports for more detail and/or explanation.

MDA Coverage

MDA coverage is a critical indicator for NTD programs and is necessary if countries are to reach 2020 targets for control and elimination. The ENVISION project helps MOH to monitor multiple kinds of MDA coverage. The targets for MDA coverage vary depending on the kind of coverage being evaluated, as shown below in Figure 4.

Figure 4. Definitions of MDA Coverage and Related Targets



Geographic Coverage

Geographic coverage provides an indication as to whether a disease program has reached scale. To determine geographic coverage, the project works with the MOH to essentially map all partner support, since ENVISION is rarely the only country partner supporting MDA. This year, ENVISION began working in three of the largest NTD endemic countries – Ethiopia, Nigeria and DRC. For each of these country programs, ENVISION played a critical role in country stakeholder discussions with the MOHs to coordinate planning and implementation in order to maximize geographic coverage with current resources. That work will continue over the life of ENVISION. Indonesia also has unique challenges when trying to achieve geographic coverage. These challenges were discussed in the introductory country brief and are included as part of the FY14 country report. In Haiti, IMA and RTI worked with USAID to mobilize additional resources to maintain geographic coverage, when a key MDA partner of the national

control program, the University of Notre Dame was unable to mobilize sufficient funds to support MDA this year. They are optimistic that they can resume support in FY15. Other country programs are still scaling up or have achieved national scale. Maps of FY15 geographic coverage included in the FY14 Country Reports, provide the most up-to-date reflection of geographic coverage.

Epidemiological and Program Coverage

While coverage looks fairly strong at a national level for most NTD programs, when looking at district-level data, some problem areas become more apparent. **To facilitate coverage analysis, ENVISION prepared district-level maps on FY13 program and epidemiological coverage (for LF), which are included as part of the FY14 country reports.** USAID's NTD Database was the source of data for these maps. One of the first responses from ENVISION NTD Advisors was that some of the maps were not correct. This spurred lots of discussion about the data, in particular, since it can be difficult to establish the target population (e.g. the denominator) when good census data is unavailable. Data quality overall has been a focus this year with the roll-out of data quality assessments (DQAs); this is discussed more in the M&E section of this report. Many more DQAs are planned for FY15 which will also help national programs to better understand where there may be data quality issues and help to address them.

For most countries, multiple factors influence coverage rates, including availability/distribution of medicines as well as a multitude of reasons for which targeted populations may be electing not to participate in MDAs. When reviewing the FY13 district level coverage maps by NTD (program and epidemiological), it is not immediately clear what is driving inadequate coverage as it is not consistently a problem in certain districts or even for certain NTD programs. ENVISION NTD Advisors have provided information for better understanding the coverage maps as part of the FY14 Country Reports and continue to work with national NTD programs to identify and address inadequate coverage, where possible.

Note: Since complete FY14 data is needed to calculate epidemiological coverage, epidemiological coverage for FY14 has not been provided in this report. It will be calculated once all FY14 MDA data has been collected.

FY13 Disease-specific program and epidemiological coverage by NTD across all ENVISION-supported countries is provided in Table 9. This table was also provided in the FY15 work plan.

Table 9. ENVISION-supported Program and Epidemiological Coverage

Epidemiological coverage targets are defined below. Programmatic coverage targets are ≥80% eligible population

NTD	Total # districts treated in FY13 (aggregate of all countries)*	Epidemiological coverage targets	# districts that did not meet coverage targets in FY13*	
Lymphatic Filariasis	434	≥65% epi coverage	Epi:	65
			Program:	93
Onchocerciasis	288	≥65% epi coverage	Epi:	134
			Program:	55
Schistosomiasis	142	≥75% epi coverage of school-aged children (SAC)	Epi:	73
			Program:	84
Soil-transmitted helminths	464	≥75% epi coverage of SAC	Epi:	118
			Program:	147
Trachoma	141	≥80% epi coverage	Epi:	28
			Program:	26
CUMULATIVE # DISTRICTS TREATED IN FY13**	1469	CUMULATIVE # DISTRICTS THAT DID NOT MEET COVERAGE TARGETS**	EPI	PGM
			418	405
		% DISTRICTS NOT MEETING COVERAGE TARGETS**	EPI	PGM
			28.45%	27.57%
See FY14 Country Reports for more detail and/or explanation. *FY13 reflects the most complete data that have been submitted to ENVISION. Not all countries' data have completed the review/approval process, so data should be considered preliminary until approved by the Designated MOH Representative in each country. **This row sums the number of districts for each disease. In other words, if a district was treated for LF and oncho, it is counted twice. If it achieved the coverage target for LF but not oncho, it is counted once as not having met the coverage targets.				

Disease-specific Assessments

DSAs are an important milestone for NTD programs, helping NTD program managers to measure impact and make important determinations about the continuation or discontinuation of treatment. ENVISION's approach is to support DSAs according to WHO guidelines regarding epidemiology and MDA coverage, taking timing into account as indicated by the data and the approval of the WHO Regional Program Review Group (RPRG) or other relevant body. ENVISION will prioritize DSAs where USAID has previously supported MDAs, with preference given to both LF and trachoma, where necessary due to funding limitations. In addition, ENVISION focuses efforts on those DSAs that are critical for decision-making. For that reason, ENVISION does not support LF mid-term DSAs, unless there is a strong technical argument in country that one ought to take place.

In FY14, ENVISION provided financial and technical assistance to national NTD programs to conduct DSAs in 11 ENVISION-supported countries. Nearly all DSAs, planned in the FY14 country work plans were conducted in FY14. Some DSAs could not be conducted/completed within the fiscal year, see Table 10. Planned assessments that did not take place affected Guinea, Haiti, Mali, Nigeria and Senegal. Reasons

for why DSAs did not take place are provided in the FY14 country reports. The Ebola outbreak prevented assessments in Guinea and political unrest blocked activities in Mali.

Table 10. Disease-specific assessments completed in FY14 with ENVISION support				
Country	Assessment	# DSA targeted	# DSA reported conducted	% of target reached
Benin	LF TAS: Post-MDA Surveillance I	23	23	100%
Cameroon	LF Pre-TAS spot-check site	4	4	100%
	LF TAS: Stop MDA	5	5	100%
	Trachoma impact survey	7	7	100%
Guinea*	LF baseline sentinel site	11	0	0%
	Oncho epidemiological assessment	56	55	98%
Haiti	LF midterm sentinel & spot checks	4	4	100%
	LF Pre-TAS sentinel & spot checks	23	10	43%
Indonesia	LF midterm sentinel & spot checks	6	6	100%
	LF Pre-TAS sentinel & spot checks	2	2	100%
	LF TAS: Stop MDA	5	5	100%
Mali	LF Pre-TAS sentinel & spot checks	12	0	0%
	Oncho epidemiological assessment	4	0	0%
	Schisto sentinel site	12	12	100%
	STH sentinel site	12	12	100%
	Oncho entomological assessment	4	4	100%
Nepal	LF Pre-TAS sentinel site	10	10	100%
	LF TAS: Post-MDA Surveillance I	5	5	100%
	STH sentinel site	25	25	100%
	Trachoma impact survey	2	2	100%
Nigeria*	LF baseline sentinel site	18	12	67%
	Oncho epidemiological assessment	27	26	96%
	Trachoma impact survey	17	17	100%
Senegal*	Oncho epidemiological assessment	29	8	100%
	Trachoma impact survey	5	5	100%
	Oncho entomological assessment	20	20	100%
Tanzania	LF midterm sentinel & spot checks	24	24	100%
	LF Pre-TAS sentinel & spot checks	48	48	100%
	LF TAS: Stop MDA	2	2	100%
	Schisto sentinel site	36	36	100%
	STH sentinel site	36	36	100%
	Trachoma impact survey	19	12	63%
Uganda	LF Pre-TAS sentinel site	17	17	100%
	LF TAS: Stop MDA	10	10	100%
	Trachoma impact survey	13	13	100%
	Post-MDA surveillance	9	9	100%
ENVISION Total	LF baseline sentinel site	29	12	41%
	LF midterm sentinel & spot checks	34	34	100%
	LF Pre-TAS sentinel & spot checks	93	81	87%
	LF TAS: Stop MDA	22	22	100%
	LF TAS: Post-MDA Surveillance I	32	32	100%
	Oncho epidemiological assessment	140	113	81%
	Schisto sentinel site	48	48	100%
	STH sentinel site	73	73	100%
	Trachoma impact survey	63	56	89%
	Post-MDA surveillance	9	9	100%
	Oncho entomological assessment	24	24	100%

Footnotes to Table 9:

See FY14 Country Reports for more detail and/or explanation.

*Data being compiled or not yet available.

***A district is considered to have passed LF TAS (Transmission Assessment Survey) if the number of antigen or antibody positive children tested in the survey is equal to or less than the critical cut off.

****A district is considered to have passed Trachoma Impact Survey (TIS) if the district-level prevalence of TF is less than 5%.

Additionally, USAID supported Data Quality Assessment (DQA) in Cameroon, Indonesia, Nigeria, Senegal, Tanzania, and Uganda and Post MDA Coverage Survey in Guinea (4 districts), Indonesia (10 districts), Nepal (21 districts), and Uganda (4 districts).

Technical Assistance for Conducting DSA

For all DSAs conducted throughout the ENVISION portfolio, the project works with national programs to:

1) ensure DSAs are well-coordinated and of high quality; 2) increase coordination with the WHO RPRGs; 3) disseminate DSA results, identifying best practices, where possible, and; 4) address DSA failures, investigating issues that may have contributed to these and addressing them as appropriate. Activities completed in support of this include -

- **Technical review of DSA protocols prior to implementation.**
- **Support for the development of national M&E plans** which clearly outline targets, including implementation of DSA. Several countries have drafts or are planning to finalize these national M&E plans in FY15, including Cameroon, Indonesia, Nepal, and Nigeria.
- **Training in conducting TAS.** ENVISION helped to facilitate and fund training of 183 persons from 13 countries (Benin, Indonesia, Uganda, Haiti, Nepal, Kenya, Tanzania, Rwanda, Zimbabwe, Malawi, Ghana, Nigeria, Sierra Leone).
- **Training in conducting TIS.** ENVISION helped to facilitate and fund 35 people from Nigeria in how to conduct trachoma impact surveys.

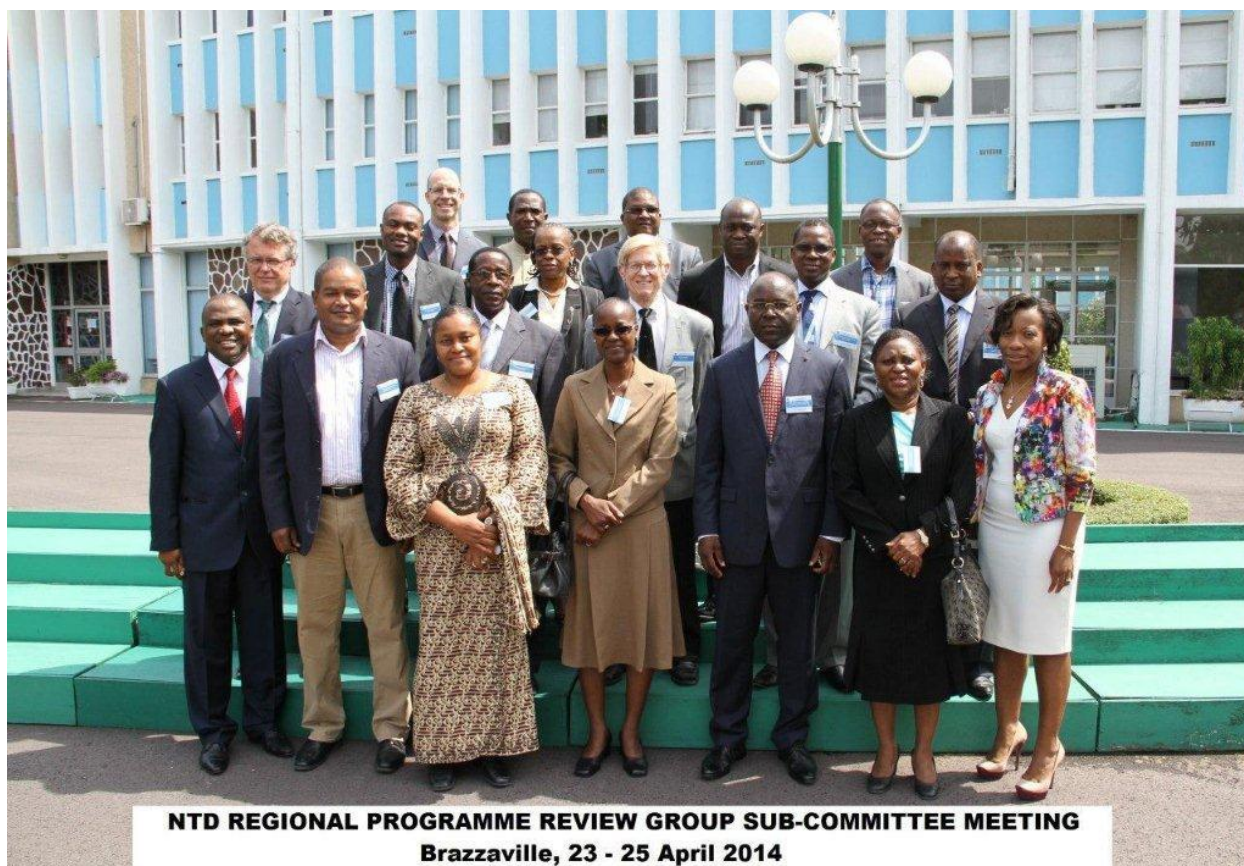
The LINKS system, developed by TFGH for collecting and processing trachoma mapping data under GTMP, was also used by ENVISION this year for disease assessments, including sentinel site surveys for LF, SCH, and TIS in Nigeria, Uganda, and Tanzania.

Table 11. Results of stop MDA assessments for LF and trachoma in FY14, by country

Country	Assessment	# DSA reported conducted	% districts passing TAS/TIS
Benin	LF TAS: Post-MDA Surveillance I	23	100%
Cameroon	LF TAS: Stop MDA	5	100%
Cameroon	Trachoma impact survey	7	71%
Indonesia	LF TAS: Stop MDA	5	40%
Nepal	LF TAS: Post-MDA Surveillance I	5	100%
Nepal	Trachoma impact survey	2	100%
Senegal*	Trachoma impact survey	5	0%
Tanzania	Trachoma impact survey	19	63%
Uganda	LF TAS: Stop MDA	10	100%
Uganda	Trachoma impact survey	13	54%
TOTAL	LF TAS: Stop MDA	20	85%
	LF TAS: Post-MDA Surveillance I	28	100%
	Trachoma impact survey	46	57%
Footnotes: See FY14 Country Reports for more detail and/or explanation. *Data being compiled or not yet available. **A district is considered to have passed LF TAS (Transmission Assessment Survey) if the number of antigen or antibody positive children tested in the survey is equal to or less than the critical cut off. ***A district is considered to have passed Trachoma Impact Survey (TIS) if the district-level prevalence of TF is less than 5%.			

Coordination with the WHO RPRG: The WHO RPRGs serve as the primary and official body reviewing the progress made by national NTD programs towards the achievement of disease-specific goals. Recommendations from the RPRG are made to country delegations regarding resource mobilization, collaboration with partners, program strengthening, inter-country mutual support, operational research, and compliance with WHO norms and guidelines.

National NTD programs rely heavily on guidance from WHO RPRGs to determine when districts are eligible for TAS and in reaching stop treatment determinations. As national NTD programs move toward elimination, the WHO RPRGs must provide increasing review and recommendations to countries. In the past, countries have faced significant challenges in receiving quality and timely feedback from the RPRGs on their programs. ENVISION staff supported RPRGs in several ways this year, including participation in meetings and providing support for preparation of validation documentation or dossiers.

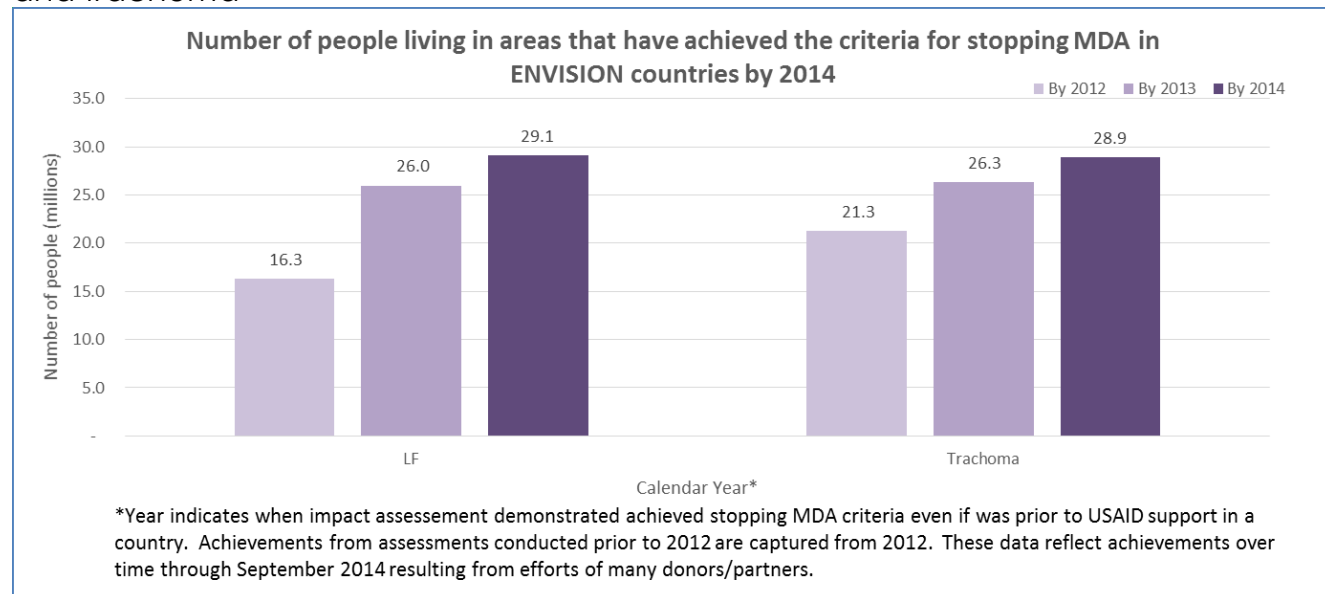


The WHO RPRG has within its remit the review of TIS. Until a more formal mechanism is defined, the RPRG informally works with the International Trachoma Initiative (ITI) TEC. ENVISION supports the RPRG and TEC decisions and helps countries with their interpretation.

Evidence of Reduced Disease Burden

The number of districts where criteria for stopping MDA for LF and trachoma has continued to increase year after year as districts pass impact assessments. In FY14, another 12 districts in ENVISION supported countries met criteria for stopping MDA for LF and another 9 districts met criteria for stopping MDA for trachoma. Because of this reduced disease burden, more than 29.1 million people now no longer live with the threat of LF and 28.9 million people no longer live in areas with trachoma. See Figure 5 for cumulative impact since the beginning of ENVISION.

Figure 5. Number of people living in areas having met criteria to stop MDA for LF and trachoma



Please note that following a report from a meeting of the monitoring and evaluation working group of the WHO Strategic and Technical Advisory Group on NTDs (the “NTD-STAG”), WHO is providing new interim standard operating procedures for undertaking impact assessments and surveillance in trachoma elimination programs. These still need formal ratification by the NTD-STAG, but WHO has indicated that planning to put them into practice may begin immediately.

Procurement and Supply Chain Management

NTD Medicines

During FY14, RTI procured diethylcarbamazine (DEC), praziquantel (PZQ) and tetracycline eye ointment (TEO) for donation to countries supported by ENVISION and END in Africa³ projects. In addition, PZQ was procured for use in Niger, Kenya, and Tanzania for the Schistosomiasis Consortium for Operational Research and Evaluation (SCORE) Project, an operational research project funded by the BMGF. See Table 12 for drug procurement details by country.

The procurement of PZQ is challenging for a number of reasons: there is a limited supply of the active pharmaceutical ingredient (API); procurement planning must be done nine months to one year in advance; and PZQ MDA is not evenly spaced throughout the year, but tends to cluster in certain months due to countries’ MDA campaigns overlapping.

Table 12. Drug procurements supported by ENVISION, FY14

Country	Project	Tablets PZQ delivered	Tablets DEC delivered	Tubes of TEO delivered
Benin	ENVISION	1,458,000		
Cameroon	ENVISION			327,300
DRC	ENVISION			16,600
Guinea	ENVISION			319,600
Haiti	ENVISION		21,834,000	
Mali	ENVISION	19,227,000		
Mozambique	ENVISION			323,100
Senegal	ENVISION			91,000
Tanzania	ENVISION	2,353,500		
Uganda	ENVISION	4,151,000		390,200
Burkina Faso	END in Africa	10,078,000		
Niger	SCORE	537,500		
Kenya	-	330,000		
First Half of FY14 Total		28,805,500	15,000,000	16,500
FY14 TOTAL		38,135,000	21,834,000	1,467,800
*Commodities delivered to countries were not necessarily distributed by national programs during the same reporting period.				

NTD Diagnostics

Along with the procurement of drugs, RTI procured diagnostic commodities, Kato Katz kits (for schistosomiasis mapping), and ICT cards (for LF sentinel site and impact surveys). A pooled procurement of these commodities is aimed at creating economies of scale and streamlined logistics. See Table 13 for diagnostics procurement by country.

Table 13. Diagnostic procurements supported by ENVISION, FY14

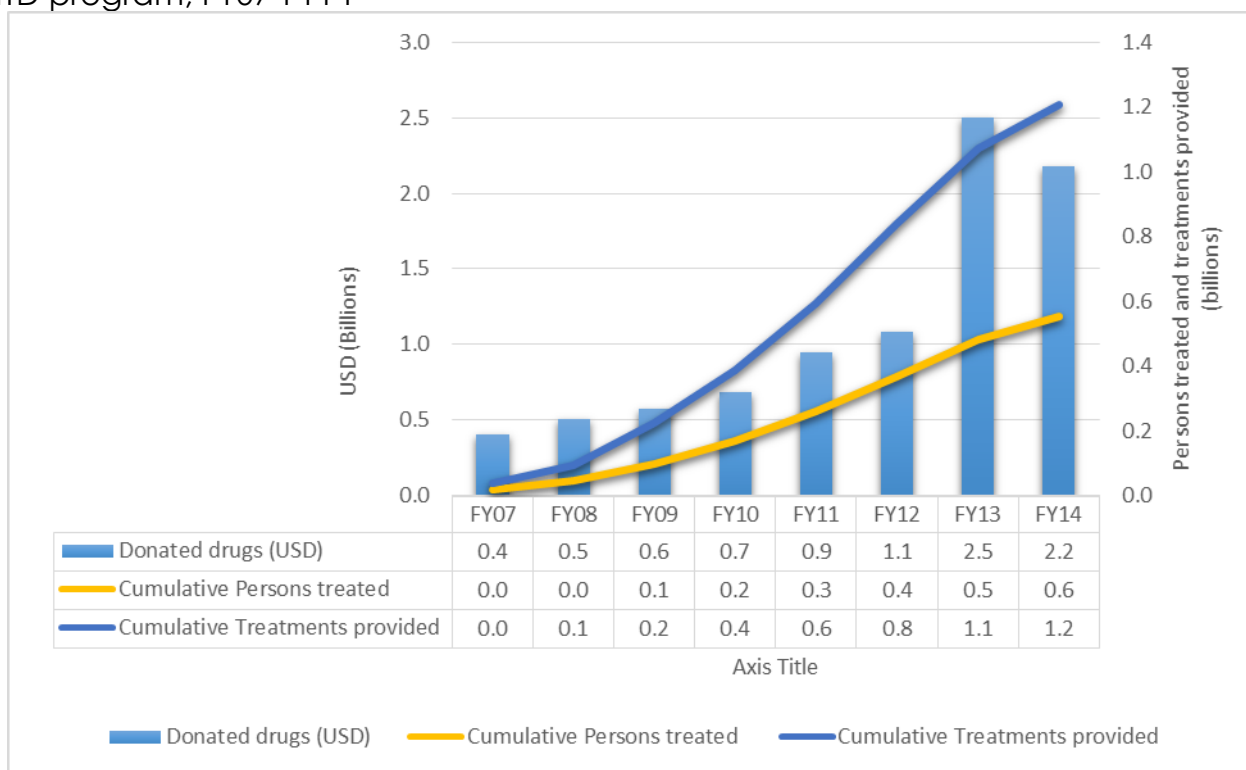
Country	Project	ICT cards delivered	Kato Katz kits* delivered
Benin	ENVISION		7,600
Cameroon	ENVISION	7,025	
DRC	ENVISION	6,950	
Guinea	ENVISION		2,000
Haiti	ENVISION	15,625	
Indonesia	ENVISION	7,050	
Nepal	ENVISION	22,350	2,000
Tanzania	ENVISION	32,900	6,800
Uganda	ENVISION	6,828	
Zimbabwe	ENVISION	14,010	
First Half of FY14 Total		95,450	41
FY14 TOTAL		112,738	18,400
* 400 tests per kit			

Donor Coordination

RTI participates in and initiates donor coordination mechanisms in order to strengthen procurement in support of country programs. In addition to participation in ongoing WHO-led discussions about PZQ procurement, RTI works with WHO and the drug donation programs to track requests, approvals, and shipments of donated ivermectin (IVM), albendazole (ALB), mebendazole (MBD), and Zithromax (ZTH). As such, ENVISION plays an important role in facilitating communication between national NTD programs and drug donation programs. This communication is informal, and includes quarterly discussions of the donation programs' application and shipping timelines. In addition, ENVISION reaches out to the donation programs when issues arise in specific countries, in order to facilitate resolution.

In FY14, more than \$2 billion in donated medicines were delivered to countries supported by USAID's NTD Program, including those supported by ENVISION. A total of \$6.7 billion donated since the start of the program. See Figure 6. Total donations to ENVISION supported countries is provided in Table 14.

Figure 6. Growth of pharmaceutical donations in countries supported by USAID's NTD program, FY07-FY14



Footnotes:

*A number of pharmaceutical companies donated drugs to USAID-supported countries during FY14, including mebendazole from Johnson & Johnson (J&J), albendazole from GlaxoSmithKline (GSK), Zithromax® from Pfizer, DEC from Eisai, and Mectizan® from Merck. WHO also donated PZQ tablets to a number of USAID-supported countries.

The values represent a donation to the entire country, not just USAID-supported areas. In addition, some USAID-supported countries also received donated drugs from USAID and other donors; these account for less than 1% of the total value.

WHO Joint Request for Selected Preventive Chemotherapy (PCT) Medicines

In 2014, countries began using the TIPAC to generate the WHO Joint Request for Selected PCT Medicines. The benefit of the Joint Request form is that NTD program managers will no longer have to complete detailed and repetitive applications for each of the major drug donation programs (except the Zithromax application to ITI). Integrating this form into the TIPAC has streamlined the process even further. TIPAC users enter the epidemiological data and stock-on-hand into the tool, then request a WHO Joint Request form in the “Reports” module. The TIPAC generates the form in a separate Excel file, and the program manager only has to complete the form’s summary and shipment tabs. The TIPAC also produces an annual work plan timeline that can be copied into the WHO’s annual work plan template; this is required along with the Joint Request and Joint Reporting forms. Integrating the Joint Request form into the TIPAC links program planning to drug forecasting, ensuring a more streamlined and integrated program planning process. It is expected that the WHO Joint Request will be more regularly and easily utilized in FY15.

Table 14. Value of Donated Drugs Delivered to ENVISION supported countries, FY14

Country	USD in FY14
Benin	\$23,990,509
Cameroon	\$48,822,919
DRC	\$134,002,450
Ethiopia	\$584,248,946
Guinea	\$65,877,768
Haiti	\$721,929
Indonesia	\$3,874,410
Mali	\$44,612,568
Mozambique	\$125,332,997
Nepal	\$846,816
Nigeria	\$344,794,553
Senegal	\$75,672,607
Tanzania	\$187,912,614
Uganda	\$200,866,817
ENVISION Total	\$1,841,577,903
Note: The values represent a donation to the entire country, not just USAID-supported areas.	

Support for Supply Chain Management

ENVISION provides funding for Drug Logistics Officers in Uganda, Tanzania, and Mozambique. These staff, hired by ENVISION and seconded to the MOH, have played key roles in helping ensure the integrity of NTD drug management in their countries. In Tanzania, the Drug Logistics Officer provided training for regional and district pharmacists on management of NTD drugs. He also worked closely with the Tanzania Medical Stores Department to complete an NTD drug inventory following the school-based MDA to ensure an accurate count of remaining NTD drugs in each district. This proved to be critical information when delays in the arrival of ALB to Tanzania for the community-based distribution occurred; with an accurate count, the Tanzania MOH was able to determine it had enough ALB in-country to move forward with MDA. Support for these secondments will continue in FY15.

Cost Share

ENVISION is committed to utilizing cost share in order to expand the reach and impact of USAID-funded activities for NTD control and elimination. Resources developed in support of FY14 activities include:

- **IMA** coordinated with **TOMS** to distribute new shoes in coordination with MDA in Haiti.
- **RTI** coordinated with **TOMS** to distribute new shoes in Kamuli district in Uganda during MDA.

- The **Carter Center** in Nigeria used funding from the **Izumi Foundation** and other donors to cover operating and management expenses in 9 states.
- Following the suspension of the program in Mali after the coup d'état in March 2012, **HKI** continued to mobilize resources from the **END Fund** to implement activities. HKI also partnered with the **Conrad N. Hilton Foundation** to obtain funding for the S and F components of the SAFE strategy for trachoma.
- **CBM** used foregone indirect rate costs for cost share purposes in DRC.

ENVISION GLOBAL LEADERSHIP

Global Mapping Initiative

As noted earlier, to reach the 2020 NTD elimination goals, all NTD-endemic countries should be at least at the MDA implementation stage for the preventive chemotherapy NTDs by the end of FY15. However, as of September 1, 2014, more than a thousand districts in 21 countries in the WHO AFRO region that are not supported by USAID still require mapping for at least one of the NTDs. In FY14, **ENVISION supported mapping of 65 districts in Zimbabwe for LF** as part of USAID's commitment to support completion of NTD mapping by 2015.

ENVISION collaboration with the Global Trachoma Mapping Project

Launched in December 2012, the DfID-funded GTMP aims to globally map trachoma by March 2015. GTMP is being led by ENVISION partner Sightsavers, as well as the London School of Hygiene & Tropical Medicine, and ITI. It is being implemented through MOH of endemic countries, with support from non-governmental organization (NGO) and academic members of the International Coalition for Trachoma Control (ICTC).

The GTMP works to identify where people are at-risk of trachoma and where implementation of the SAFE strategy is needed. It includes the global roll-out of a standardized assessment process which uses trained eye health workers and smartphones. Data collected are used to create and update MOH trachoma action plans, enabling national programs to plan for trachoma elimination by 2020 with the necessary data.

USAID's NTD projects (ENVISION and END in Asia) collaborate with GTMP, harmonizing technical approaches to follow WHO guidelines and providing funding for mapping where needed. USAID-supported trachoma mapping accomplishments are included in GTMP results, and when additional districts are determined to need mapping in USAID-supported countries, they are added to GTMP's targets. ENVISION countries have benefited from GTMP funding for disease mapping (Benin) and from extensive technical assistance. In countless ways, the projects' donors and implementing organizations have united to ensure the highest standards of quality are observed for trachoma mapping globally.

In addition to baseline mapping, protocols developed through GTMP are already being used in ENVISION-supported countries for TIS (in Uganda and Tanzania in FY14). To accomplish this, the LINKS system was slightly modified so that the data were recorded as impact assessments and are uploaded as updates to the Global Trachoma Atlas (www.trachomaatlas.org), following MOH approval.

FY14 Collaboration with GTMP: In FY14, ENVISION collaborated closely with GTMP, at the global level by participating in weekly GTMP management calls and attending regular GTMP in-person technical and advisory meetings. At these meetings, ENVISION staff provided feedback on countries' mapping progress, describing challenges faced and finding solutions with GTMP colleagues. Project staff worked to ensure that trachoma mapping supported by ENVISION was in step with GTMP standard mapping

methods, including the use of mobile technology. ENVISION provided funding for 74 eye care professionals from Benin, Cameroon, DRC, Guinea, Senegal, Mali, Mozambique, Tanzania, and Uganda to attend trachoma grading and recorder trainings organized by GTMP. The project also organized trachoma mapping standardization workshops in Benin and Guinea that involved 50 MOH, district and laboratory staff.

In country, ENVISION staff worked as intermediaries between MOH staff and GTMP, ensuring a clear understanding of data access (cloud storage), analysis, and use. ENVISION country offices liaised between MOH field teams gathering data and global-level data processing, providing on-the-ground technical backstopping and troubleshooting on a daily basis. These same devices will be utilized by MOH for TIS as well as other DSAs supported by ENVISION. In total, 128 districts were mapped in coordination with GTMP during FY14.

Technical Assistance Facility

ENVISION established the TAF to serve the specific technical assistance needs of countries receiving USAID support for NTD control and elimination. It was designed to be flexible and responsive, with the level of effort determined by demand and coordinated through a small ENVISION management and technical team accessing a broad range of consultant expertise.

Status of Current TAF Requests

There is continued demand for assistance provided through the TAF—in FY14, ENVISION responded to requests in Bangladesh, Benin, Cambodia, the Democratic Republic of Congo, Laos, Nepal, the Philippines, Vietnam, and Zimbabwe. The TAF mechanism has helped countries address a range of issues, including training on TAS; developing protocols for and training on LF, STH, and trachoma assessment methodologies; and proposing solutions for endgame issues related to LF and trachoma. Table 15 and 16 detail the FY14 TAF activities, some of which will continue into FY15.

Table 15. FY13 TAF Requests carried over into FY14			
Requester	Country	Topic	Status
END in Asia	Cambodia	Trachoma assessment training, supervision and data analysis	Complete. Report available. Report addendum will be sent when phase one assessments are finished.
END in Asia	Laos	Trachoma assessment training, supervision and data analysis	Complete. Report available.
END in Asia	Philippines	LF program review and pre-dossier development	Complete. Report and pre-dossier available.

Table 16. FY14 TAF Requests			
Requester	Country	Topic	Status
END in Asia	Bangladesh	LF program review and pre-dossier development	Draft report under review. To be finalized in FY2015 Q1.
END in Asia	Cambodia	LF pre-dossier development	Pending until 2015, due to consultant availability.
END in Asia	Laos	Trachoma hotspot investigation	Complete. Report and protocol available.
END in Asia	Vietnam	Trachoma assessment training, supervision and data analysis	Complete. Report available. Report addendum will be sent when phase one assessments are finished.
END in Asia	Vietnam	LF pre-dossier development	Pending until 2015 after TAS are completed.
MOH Benin	Benin	LF TAS training and supervision	Complete. Report available in English and French.
MOH DRC	DRC	Trachoma desk review	Complete. Report and protocol available.
MOH DRC	DRC	Trachoma mapping training	Complete. Report available.
MOH DRC	DRC	LF sentinel site training and supervision	Ongoing. Results to be analyzed in FY2015 Q1.
MOH Indonesia	Indonesia	LF mapping supervision	Cancelled due to change in availability of consultant.
MOH Nepal	Nepal	Assist in developing a sampling methodology for STH surveys and analyzing the data	Ongoing. Results to be analyzed in FY2015 Q1.
World Vision	Zimbabwe	LF mapping protocol development and training	Complete. Report available.
World Vision	Zimbabwe	LF mapping data review meeting	Complete. Report available.

Sharing Results and Lessons Learned

TAF support helped provide tools for the global NTD elimination agenda, particularly in relation to endgame issues for LF and trachoma. The results of pilot testing the LF elimination dossier template in the Philippines and Bangladesh were presented at a WHO M&E Subgroup 2 meeting in Geneva and the template will be included in the Standard Operating Procedures package on validating LF elimination that will be presented to the NTD-STAG in April 2015. The consultants supporting trachoma assessments in Southeast Asia worked closely with WHO HQ and other international trachoma experts to create and modify methodologies for determining which areas needed assessment and how to investigate potential hotspots.

At a country level, TAF support was crucial in providing the capacity necessary to move national programs forward. The Philippines and Bangladesh programs have LF elimination ‘pre-dossiers’ and a better understanding of the next steps needed to finalize the dossiers. The support for LF mapping in

Zimbabwe now means that the country has an opportunity to meet 2020 elimination goals, based on evidence of endemicity. In DRC, where MOH capacity is low, the technical assistance helped create a plan for trachoma mapping, and ensure that data collection for both LF and trachoma was implemented according to appropriate guidelines. The TAF support for LF in DRC offered an opportunity to test new diagnostics for LF and onchocerciasis, which will provide useful information for ongoing research and future guideline development.

Capacity Strengthening

Capacity strengthening for NTD control and elimination has become a clear priority for ENVISION countries and for WHO, as evidenced by country requests and the continued efforts of the Working Group on Capacity Strengthening (WG-CS) that was formed as part of the WHO Senior Technical Advisory Group (STAG) for NTDs. USAID and ENVISION endorse capacity strengthening activities as an important element of global capacity development to help countries reach NTD goals. ENVISION contributes to improved global NTD capacity – knowledge and skills – in a number of ways:

- Development of new courses and resources to address additional training gaps;
- Development of a network of facilitators and resource individuals to amplify scale-up of ENVISION's capacity strengthening efforts
- Funding and technical support for participation in regional and country-level trainings
- Ongoing opportunities for national NTD program staff for peer support and experience sharing during regional trainings, meetings and workshops;
- Support for cascaded training for MDA in ENVISION supported countries.

Partnering to Meet Capacity Strengthening Goals

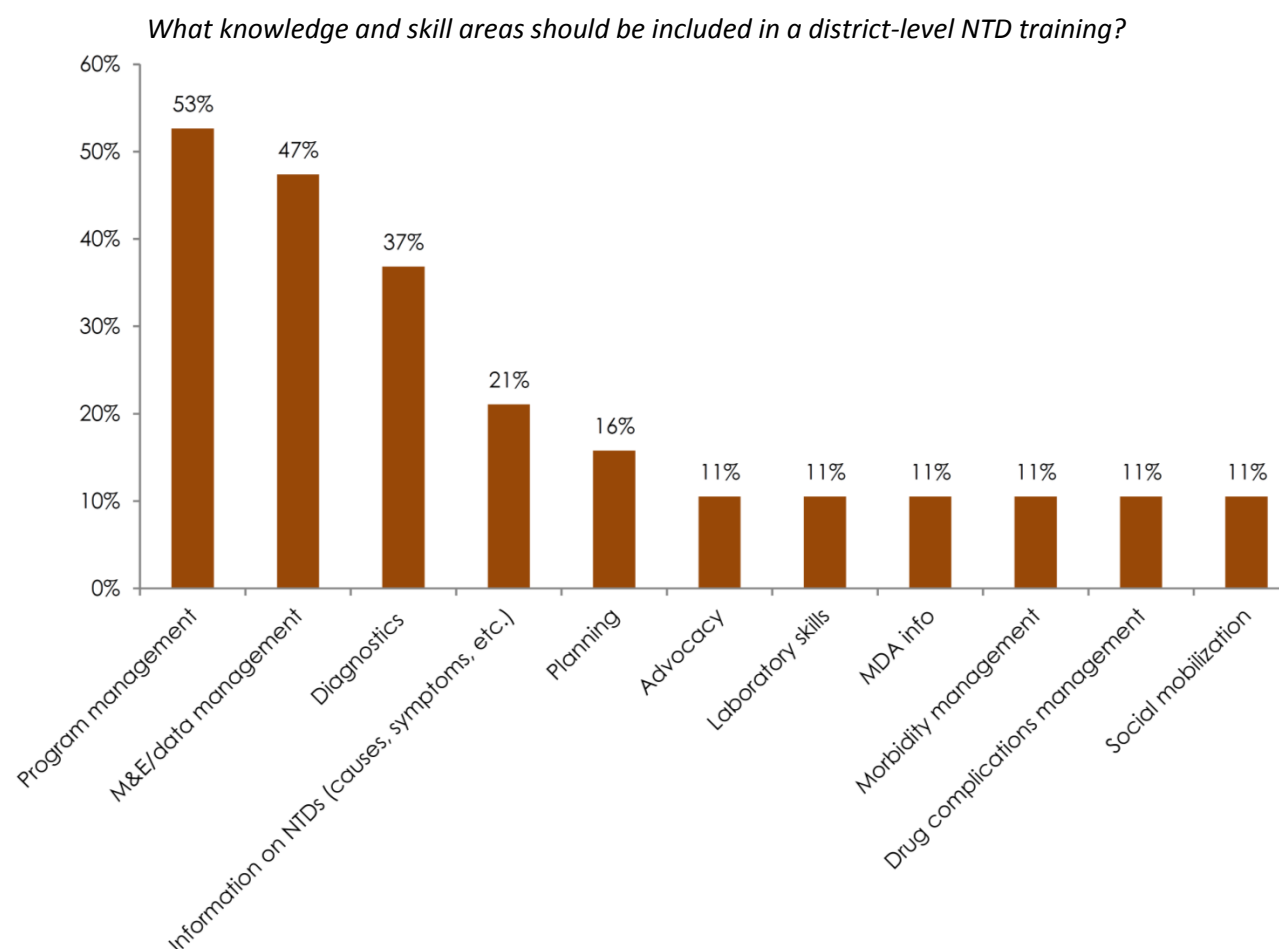
ENVISION staff serve as a member of the WHO WG-CS, which assesses existing training programs for possible implementation where need is identified, develops curricula for NTD program technical and managerial training where there are gaps, and builds on the experience of country programs and NTD partner organizations to update trainings and develop new programs to keep pace with current practices. ENVISION has made strong contributions to the WHO WG-CS this year, contributing to the discussion on the capacity needs identified in our many portfolio countries; being seen as a leader within the group on collaborative initiatives and materials development – especially with the District-level NTD Training in development; and in being the lead implementer of the Programme Managers' Training. ENVISION has also trained other organizations, including CNTD, SCI, Sightsavers, Malaria Consortium and END Fund, to provide training and technical assistance on ENVISION-developed tools, such as the TIPAC, Integrated NTD Database and DQA, to DfID-supported countries.

Assessing Capacity Strengthening Needs

During FY14, ENVISION collaborated with WHO to conduct training and capacity needs assessments for the AFRO region and, separately, for Nigeria at the state level. Selected result from the AFRO assessment is provided in Figure 7 below. The results of the assessment have, and will continue to

inform the implementation of the Program Managers Training Course, the development of the District-level NTD Course, and other activities in the region and, specifically, in Nigeria.

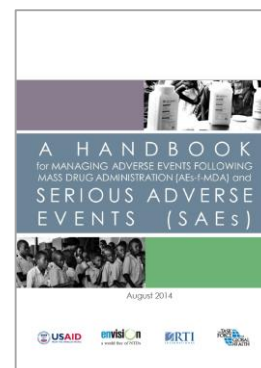
Figure 7: AFRO Capacity Needs Assessment: Survey of national NTD program managers from the AFRO region



Last year ENVISION also conducted a survey of its own headquarter staff, partner organization headquarter staff, country field offices and MOHs to identify where they would like to improve their own ability to use ENVISION and other NTD tools, guidelines and resources. The needs identified in this important survey informed the development of the ENVISION training series, which will include separate, ongoing trainings on the TAS, SAE management, the TIPAC, DQA, and the Integrated NTD Database. ENVISION countries have further identified their training and capacity strengthening needs through additional training requests. Finally, RTI has consulted with WHO, WHO regional offices, other NGOs in the NTD space, and the WHO WG-CS to understand the broader global NTD capacity needs. All of these sources of information informed capacity strengthening activities outlined in the FY15 work plan.

Training Materials and Resources Development

Serious Adverse Events Course. In FY14 ENVISION published A Handbook for Managing Adverse Events Following Mass Drug Administration (AEs-f-MDA) and Serious Adverse Events (SAEs). The handbook provides NTD program managers a brief, capsular set of steps to follow when they need to deal with SAEs and serves as an aid to facilitate immediate and appropriate program responses. The practical manual is derived from the WHO manual “Assuring Safety Of Preventive Chemotherapy Interventions For The Control Of Neglected Tropical Diseases: Practical Advice For National Programme Managers On The Prevention, Detection And Management Of Serious Adverse Events” that provides extensive information on the detection, management, investigation and reporting of AEs and SAEs.

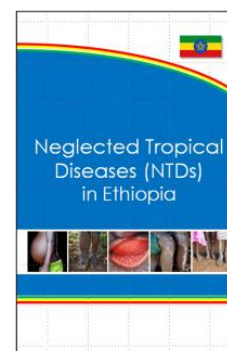


During the reporting year, ENVISION also began developing training to accompany the Handbook. The training will prepare participants to detect, treat, manage, investigate, report, and manage appropriate communications for AEs and SAEs. Two training packages will be developed, one each for national NTD program managers and community drug distributors.

WHO Standardized District Level Management NTD Training Course. In partnership with WHO and several other NTD-related organizations, RTI contributed to the development of a Standardized District-level Management NTD Training Course. The course includes modules on disease basics; program management; budgeting and resource mobilization; advocacy, sensitization and social mobilization, MDA operations; morbidity management; water, sanitation, and hygiene (WASH); laboratory and diagnostics; and M&E. In the reporting period, project staff developed several training modules and held regular teleconferences to coordinate with the other organizations developing the training. An ENVISION capacity strengthening team member traveled to meet with WHO and the other developers to review all draft training material content. The meeting successfully advanced development of the training, which is now expected to be finalized and piloted in Q1 and Q2 of FY15.

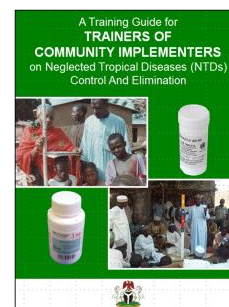
Developing NTD training resources and tools.

Ethiopia NTD Pocket Manual for Health Workers. RTI developed key resources and tools that will increase the capacity of those on the front lines of NTD outreach and drug distribution to more effectively do their jobs. One such resource, the NTD Pocket Manual for Health Workers in Ethiopia, was developed in collaboration with the Ethiopia FMOH to provide key messages and graphics on each PC NTD's mode of transmission, simplified life cycles, symptoms, treatment and prevention, and MDA requirements. The manual was completed and translated into Ethiopia's five principal languages in FY14 and is now being printed for distribution throughout the country.



Nigeria Training of Community Implementers on NTD Control and Elimination.

ENVISION also worked in partnership with the Nigerian FMOH to develop the Training of Community Implementers on NTD Control and Elimination. The training manual provides instructions on how to conduct a complete training for CDDs on how to distribute any of the PC NTD drugs as part of the broader training manual developed by the FMOH and reviewed and edited by RTI, the Training of Trainers of Front Line Health Facility Staff (FLHFS) on NTD Control and Elimination.



WHO NTD Online Toolbox. To further strengthen the capacity of NTD country programs, RTI worked with other ENVISION partners this year to contribute to the development of the WHO online NTD Toolbox. The toolbox will serve as the go-to resource for NTD guidelines, tools, IEC materials, job aides, tutorials, etc. Documents will be added to the online repository on an ongoing basis and made available to all country programs, making the toolbox a central channel for the dissemination of key resources to the global NTD community. The toolbox can be found at <http://54.213.233.103/>

Translation of NTD Guidelines and Tools. Because resources, tools and trainings must be understandable and accessible if they are to effectively contribute to countries' capacity to implement their NTD control and elimination goals, the project funded the translation of several important items during FY14. The Media Training was translated from English to Portuguese for Mozambique. Additionally, RTI supported the continued translations of key pieces of the database into French and Portuguese, and of the DQA Guidelines and Tool into French. Finally, all WHO Integrated Programme Managers' training materials were translated into Portuguese for use in a Programme Managers' training scheduled to take place in Mozambique in FY15.

FY14 Training

The ENVISION project has developed, disseminated and provided training and technical assistance on the tools and resources necessary for effective NTD program implementation. As other organizations and countries have come to see the strong value of these tools and resources and are now requesting to use and be trained on them, ENVISION is increasingly seen as a leader in the field of NTD capacity strengthening.

ENVISION supports the implementation and participant attendance for several courses to strengthen the capacity of national NTD programs. Further information on each regional course, including the profile and countries/regions of those to be trained, as well as a description of ENVISION's support, can be found in Table 17 following the descriptions below.

Training Implementation

WHO Integrated NTD Programme Managers' Training Course. This modular, five-day course developed by WHO, USAID, RTI and many additional NTD partners features critical components of integrated NTD strategies, including implementation techniques, program management principles, drug and serious

adverse event management, M&E, planning and costing analysis, and advocacy strategies to garner long-term support.

During FY14, RTI managed the implementation of the first WHO Integrated NTD Programme Managers' Training in partnership with the Nigerian FMOH, WHO and AFRO. The course drew 120 participants, including NTD program coordinators from each of Nigeria's 36 states and Federal Capital Territory (FCT), zonal coordinators, key FMOH NTD staff, and NGDO representatives. The course was also implemented in Ethiopia, with participants from the country's nine regional health bureaus, the capital territory, key FMOH NTD staff and NGO representatives as well. Both the Nigeria and Ethiopia course were facilitated by local NTD leaders and international experts.



Photo: Nigeria Program Manager's Training



Photo: Ethiopia Program Managers' Training

Integrated NTD Database Training and DQA Trainings.

The Integrated NTD Database Training equips participants with the knowledge and skills to customize the national database template to their country context and utilize the database to store, manage,

analyze, and report NTD data. The training includes orientation to the tool by demonstration as well as a number of practical exercises to familiarize users with the tool.

The DQA course provides training for national NTD program managers, M&E officers and data managers to conduct the DQA in their countries, interpret the results, and develop a country-specific action plan that strengthens the national program's NTD data management and reporting system. The database and DQA trainings are held in conjunction with one another to minimize costs and travel time.

RTI conducted a training of trainers (TOT) on the DQA and Integrated NTD Database (also noted in the M&E section) at KEMRI in Nairobi, Kenya in February 2014 to equip individuals with the knowledge and skills to support NTD endemic countries to customize the national database template to their country context and then utilize the database to store, manage, analyze, and report NTD data. Thirty five participants/facilitators, including representatives from WHO HQ, AFRO, EMRO (Yemen), APOC, five WHO National Program Officers from the Africa Region, Ministries of Health, partners (including RTI) and consultants received hands-on experience on utilizing the tool. The participants of this training helped in extended field testing of DQA during FY14 and will continue to assist in the roll-out the tool in FY15.

RTI also facilitated a DQA and Database training in London, UK in June 2014 for the representatives from SCI, CNTD, Sightsavers, Malaria Consortium and WHO. The training prepared the representatives to train and provide technical assistance to countries in their portfolios to implement the DQA and Database. ENVISION will continue to coordinate with the DfID-supported partners trained in London to rollout the tool across NTD-endemic countries supported by USAID and/or DfID.

In the Nigeria-specific capacity needs assessment conducted at the beginning of FY14, Nigerian state NTD coordinators noted that data management was the area they felt most needed improvement if their NTD programs were to be effective. Bearing those needs in mind, RTI conducted a DQA training in Nigeria for 14 participants in September 2014.

Grants Management Training. Grants management training aims to develop the capacity of NGOs, civil society organizations, and host government entities to successfully manage U.S. government funds – USAID funds in particular. The core elements focus on pre-award surveys, evaluation, types of grants, execution of grant award, administration and regulatory compliance.

In FY14, RTI conducted a Grants Management Training for 106 participants from Uganda and 21 participants from Nepal in Q1-Q2 to develop the capacity of the MOH and NGOs in both countries to successfully manage USAID funds. Later in Q3, ENVISION trained 58 NGO staff from Indonesia on grants management as part of a larger NGO Capacity Building workshop.

TIPAC Training. This five-day course developed by RTI provides hands-on practical training on the TIPAC, an Excel-based tool developed by RTI and endorsed by WHO for integrated costing and planning of NTD activities. The course enables participants, typically national NTD program data managers, to complete the TIPAC using their own country-specific data and generate various reports, including five year drug projections, funder gap reports, and the WHO joint request for PC medicines.

In FY14, ENVISION collaborated with AFRO to train representatives from MOHs from 20 countries in eastern and southern Africa to implement the TIPAC. AFRO's endorsement of the tool has generated strong interest in the TIPAC in the region.

ENVISION also conducted a TIPAC training in London, UK for representatives of CNTD, SCI, Sightsavers and the END Fund to prepare them to support implementation of the TIPAC in their portfolio countries. The training also prepared MOH staff from Liberia and Malawi to implement the TIPAC in their own countries. ENVISION will continue to coordinate with the DfID-supported partners trained in London to implement the TIPAC across NTD-endemic countries supported by USAID and/or DfID.

Earlier in the year, project staff and individuals trained by RTI to facilitate TIPAC trainings also provided an introduction and overview of TIPAC steps to national NTD program managers at the AFRO NTD Programme Managers' Meeting in Uganda in October. RTI also provided support to PAHO in its efforts to roll the TIPAC out in countries in the Americas region by providing training to PAHO HQ staff and for Brazilian states.

ENVISION also conducted a TIPAC training in Benin for MOH NTD program staff. The training and TIPAC implementation, done with Benin's actual NTD data, led to important planning discussions and improved budgeting for the national NTD program.

InsideNGO Training Support. To build local capacity for effective program management, the project supported the participation of in-country staff in multiple Inside NGO trainings. Earlier in FY14, RTI's Mozambique staff participated in the Financial Management for US Government Funding training, and RTI's Indonesia staff participated in the USAID Rules & Regulations: Grants & Cooperative Agreements training.

Media Training. This three-day training, held in partnership with ITI, builds the skills of MOH staff and journalists to use mass media to create awareness of NTD activities and scheduled MDAs for successful program implementation. During the training, country programs develop their advocacy messages, identify avenues for disseminating information, and develop core competencies in effective communication using various media.

In FY14, a Media Training was held in Mozambique, bringing together representatives of the local media, MOH, and NGOs. A highlight of the training was a field visit, in which a small team of journalists, training facilitators and MOH staff traveled to a village to meet local community health workers and NTD-affected individuals. The journalists appreciate the chance to understand the human dimension of the diseases and went on to write several news articles on their experience, creating a platform for advocacy and further awareness of the need to participate in MDA.

GTMP Trachoma Grading Training. A Trachoma Grader Training course, developed and led by the GTMP, includes modules on the GTMP, trachoma fundamentals, the SAFE strategy, the WHO simplified trachoma grading system, trachoma examination techniques, hands-on practice grading in the field, the

use of mobile devices, and training skills. RTI regularly supports participation in the course to prepare trainers to continue building capacity of trachoma graders in ENVISION countries.

In October, RTI supported the travel and participation of 13 individuals from Benin, Cameroon, DRC, Guinea, Senegal and Mali to attend a regional Global Trachoma Mapping Project (GTMP) Training of Grader Trainers held in Ethiopia for Francophone countries.

In addition to the regional training of grader trainers, ENVISION partnered with GTMP to provide trachoma grading or recording training to over 100 trainees in individual trainings held in Tanzania, Uganda, Guinea and Senegal. Participants trained on recording were also given Training on the LINKS system, which uses mobile devices for NTD data collection and cloud-based reporting. The Links System enables users to more efficiently and accurately conduct NTD mapping and impact surveys on one standardized mobile survey framework.

Table 17. Training Courses Implemented with ENVISION support in FY14

Training	# of training participants	Profile of training participants	Countries or regions	Nature of ENVISION support	Collaborators and their role
WHO Integrated NTD Programme Managers' Training	192	FMOH staff, regional and state NTD program managers and data managers, NGO staff	Nigeria, Ethiopia	Technical, facilitation, financial	WHO (technical, facilitation), WHO-AFRO, Nigeria FMOH, Ethiopia FMOH, (all facilitation)
Integrated NTD Database Training	54	MOH staff, NGOs	Uganda, Nigeria, Senegal, Tanzania, Benin, CAR, Madagascar, Yemen, Burkina Faso, Zambia, DRC, Liberia, Ghana, Kenya, India, US, UK	Technical, facilitation, financial	WHO and WHO-AFRO (technical, facilitation)
Data Quality Assessment Training	68	MOH staff, NGOs	Uganda, Nigeria, Senegal, Tanzania, Benin, CAR, Madagascar, Yemen, Burkina Faso, Zambia, DRC, Liberia, Ghana, Kenya, India, US, UK	Technical, facilitation, financial	WHO and WHO-AFRO (technical, facilitation)
Financial management, grants management; USAID rules and regulations trainings	198	MOH staff, district staff, NGOs	Uganda, Kenya, Mozambique, Indonesia, Nepal	Technical, facilitation, financial	InsideNGO (facilitation)
Media Training	24	MOH staff, journalists	Mozambique	Technical, financial	ITI (technical, financial, facilitation)
Supply Chain capacity training	4	MOH staff, NGO staff	Uganda, Mozambique, Tanzania, Ethiopia	Technical, facilitation, financial	Pamela Steele Associates (technical, facilitation)
Mapping Training	76	MOH, district and laboratory staff	Indonesia	Technical, facilitation, financial	--
TAS Training	183	MOH, district and laboratory staff, AFRO, RPRG members, NGOs	Benin, Indonesia, Uganda, Haiti, Nepal, Kenya, Tanzania, Rwanda, Zimbabwe, Malawi, Ghana, Nigeria, Sierra Leone	Technical, facilitation, financial	CDC (facilitation, technical), AFRO (technical, facilitation, financial), WHO (technical, facilitation)
Trachoma Impact Survey Training	35	MOH, district and laboratory staff	Nigeria	Technical, facilitation, financial	Carter Center (technical, facilitation, financial)

Table 17. Training Courses Implemented with ENVISION support in FY14

Training	# of training participants	Profile of training participants	Countries or regions	Nature of ENVISION support	Collaborators and their role
TIPAC Training	50	National NTD program data and program managers, NGO staff	Botswana, Benin, Ethiopia, Eritrea, Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Namibia, Nigeria, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar, Zimbabwe, US, UK	Technical, facilitation, financial	AFRO (technical, facilitation, financial);
Trachoma Grading and Recording Trainings	74	eye care professionals	Benin, Cameroon, DRC, Guinea, Senegal, Mali, Tanzania, Uganda, Mozambique	financial	GTMP (technical, facilitation, financial)
Trachoma mapping standardization workshop	50	MOH, district and laboratory staff	Benin, Guinea	Technical, facilitation, financial	--
Facility-level pre-survey on trachomatous trichiasis – surveyor training	8	MOH, district and laboratory staff	DRC	Technical, facilitation, financial	--
TOTAL	1016				

In addition, ENVISION provided funding and technical assistance to national NTD programs in support of the cascaded training conducted as part of MDA implementation, see Table 18. The large majority of people trained for MDA are drug distributors. For some countries, MDA (and associated training activities) was postponed into FY15, see FY14 country reports for more explanation.

Table 18. Persons trained for MDA with ENVISION support in FY14		
Country	# Persons targeted for training	# Persons trained
Benin*	17,588	123
Cameroon*	115,465	33,081
Ethiopia	42,549	255
Guinea	26,956	11,148
Haiti	15,983	15,966
Indonesia*	74,344	18,878
Mali	13,240	3,355
Mozambique	2,220	1,391
Nepal*	51,294	48,723
Nigeria*	150,365	1,099
Tanzania	71,537	15,433
Uganda	164,897	159,251
ENVISION TOTAL	746,438	308,703
*Data being compiled or not yet available.		

Expected Long-term Impact of Capacity Strengthening Activities

ENVISION capacity strengthening efforts are expected to make national NTD programs aware of and prepare them to effectively use new and existing global standards, best practices, tools and resources to increase their own ability to successfully implement MDA and scale-up coverage. Over the long-term, these efforts will lay the foundation for country-owned, effective and sustainable national NTD programs that are ultimately able to meet their NTD control and elimination targets.

Monitoring and Evaluation

ENVISION's enhanced M&E strategy prioritizes the following:

- Increasing the capacity of countries to implement nationally-owned M&E for NTD control and elimination in line with WHO guidelines;
- Implementing M&E activities within a programmatic context; and
- Facilitating the use of data from USAID-supported projects.

In FY14, the project carried out several activities to ensure effective monitoring, evaluation, and data management of USAID-supported NTD programs. RTI worked with country teams to operationalize the enhanced M&E strategy by utilizing USAID's data capture tools, managing USAID's NTD database, and strengthening the capacity of countries and partners to implement M&E activities, including DSAs, DQAs, and post-MDA coverage surveys. Additionally, RTI collaborated with WHO and other partners to develop global M&E tools and guidelines, including DQA and the Integrated NTD Database.

Different Programs: Different M&E Needs

ENVISION countries are in varying stages of program maturity, ranging from completing mapping, scaling up MDA, and transitioning to post-MDA surveillance. As a disease program matures, the M&E requirements also evolve. In early stages of program implementation, a country should use its mapping data to inform intervention strategies, such as MDA, morbidity management, vector control, environmental and hygiene improvement strategies, etc.; develop data collection tools; and establish a routine reporting and feedback system. Baseline assessments may be necessary to establish prevalence values against which the effects of an intervention can be assessed, and key indicators and targets should be defined and incorporated into the data collection and reporting system.

As a country moves to MDA implementation, the priorities shift to ensuring quality of routine data collection, reporting and feedback, and using the data to inform program implementation. This includes analyzing reported coverage results to assess performance at national, district, and sub-district levels. Additional activities may be required to ensure the quality of program implementation, such as post-MDA coverage surveys, DQAs, and supportive supervision. If the national program does not yet have a functioning database to facilitate data storage, analysis, and reporting, it is important that one be developed and implemented at this time.

After effective intervention has been carried out for a number of years, a program should carry out DSA in line with WHO guidelines to assess whether the prevalence has decreased to a point where the MDA frequency can be reduced (schisto or STH), or stop completely (LF, oncho, or trachoma; schisto if targeted for elimination). At this point, national programs need to be equipped with the human, technical and funding resources to determine the appropriate timing for assessments, carry out the assessments with sufficient scientific rigor, and correctly interpret and apply the results. After results of DSA indicate that MDA can be stopped, post-MDA surveillance activities are necessary in order to detect any recrudescence. Additionally, if it has not started already, the national program should compile the

appropriate documentation for the dossier to verify elimination of the disease as a public health problem.

TA to Country Governments to Develop and Implement Quality M&E Systems

ENVISION provides technical and financial assistance to country governments to implement a high-quality M&E system according to each program's stage of maturity and corresponding M&E needs. During FY14, ENVISION supported the M&E activities to ensure that programs are monitored effectively and results are used to guide programmatic decisions.

Routine data collection, reporting and feedback of MDA activities and performance. In FY14, ENVISION provided technical guidance and financial assistance when needed to develop and strengthen national program tools to collect MDA-related data, including at-risk populations, target populations, treated populations disaggregated by sex and age, and stock-out. For example, in Nigeria, the data collection reporting tools were updated by the FMOH with technical input from RTI and other stakeholders. In Uganda, treatment values in the reporting forms are disaggregated by sex, due to revisions of the data collection forms.

Since the inception of ENVISION, the M&E team has been providing feedback to countries on coverage performance data submitted through the Disease and Program workbooks for the semi-annual reports. This feedback has included requests to provide information about the reasons for any low reported coverage as well as to identify strategies to improve coverage in upcoming MDAs. By providing this feedback, we facilitate a culture of data use, rather than simply reporting.

RTI has continued to provide technical assistance to national programs' that request the use of mobile technologies to capture M&E data on NTDs, including pending sentinel site and spot check surveys for SCH/STH, pre-TAS and TAS assessments, trachoma pre-survey assessments (desk reviews), trachoma baseline mapping (including GTMP), trachoma impact assessments, and NTD operational studies. Collaborating with the Task Force for Global Health, RTI provides technical support to national program managers in the use of the LINKS system (www.linkssystem.org) as an electronic gathering system for various M&E data capture and operational research opportunities. See Table 19 for mobile capture initiatives supported by ENVISION during FY14.

Table 19. Mobile Data Initiatives, by Country

Country	Mobile Capture Initiative
Nigeria	<ul style="list-style-type: none"> RTI and Sightsavers are working together with the Federal Ministry of Health to ensure that m-health formats, like SMS reporting on MDA results, used will be able to interface with the integrated NTD database. If the pilot is successful and the format gains approval of the steering committee, RTI will consider rolling out the model in other USAID-supported states in FY15 SCH/STH sentinel site surveys were supported in Ondo and Cross Rivers States using Wi-Fi-enabled tablets.
Tanzania	<ul style="list-style-type: none"> Trachoma impact and baseline prevalence mapping was completed including 9 impact surveys and 3 baseline prevalence surveys (non-GTMP). LF Sentinel Site Surveys completed using Wi-Fi enabled tablets SCH/STH Sentinel Site Surveys completed in # districts using Wi-Fi enabled tablets
Uganda	<ul style="list-style-type: none"> RTI supported electronic capture of data for trachoma impact assessment surveys in 9 districts in Busoga and Karamoja sub-Region through the use of android-based devices (previously procured by ENVISION) and development of an impact assessment survey through LINKS. RTI and the National NTD Control Program developed strategy with the HMIS and UNICEF to expand current mTrac SMS reporting system (supported by UNICEF) to capture MDA results starting in FY'15. Part of the development process still requires mapping data reporting streams to determine an easy SMS code for key data points, and generation of reports. Completed electronic capture of LF sentinel Site surveys and LF TAS.
Senegal	<ul style="list-style-type: none"> An Oncho/LF co-endemicity survey was conducted in # districts using android-based devices Trachoma Impact Surveys completed with android-based phones.
DRC	<ul style="list-style-type: none"> Electronic capture of data for Trachoma pre-assessment surveys using mobile phones.
Additionally, as part of the Global Trachoma Mapping Initiative (GTMP), ENVISION utilizes mobile data collection for trachoma mapping. This partnership is detailed in the Global Mapping Initiative section of this report.	

Implementing Data Quality Assessments. In order to assess the quality of the NTD reporting and data management system through a systematic framework, RTI in collaboration with WHO developed Data Quality Assessment (DQA) guidelines, tools, and training materials in FY2013. RTI solicited feedback on the materials from multiple partners including WHO/HQ, AFRO, PAHO, CNTD, and USAID, and their suggestions were incorporated into the updated guidelines and tools.

During FY14, RTI provided country-specific orientation, technical assistance and funding to implement the DQA exercise to several ENVISION-supported countries. DQAs were conducted in 6 countries in FY14 (Cameroon, Indonesia, Tanzania, Nigeria, Uganda, and Senegal). In all these countries, the technical assistance was provided by ENVISION staff, HQ or country staff.

The national level representatives, who were a part of the DQA team, witnessed the data management and reporting challenges in their countries firsthand which led to a spirited discussion about how to improve the data reporting system for their countries. The improvement could be achieved through simple practical changes (such as buying plastic containers to store the records) to greater policy-level changes (such as modifying reporting forms to include age and gender breakdowns or revising national guidelines). For example, as a result of DQA, in Indonesia, the national program agreed to revise the LF national guideline forms and ENVISION agreed to support a training on reporting for NGOs and district LF focal points, and added a one-day district level training for health center staff on recording and reporting prior to 2014 MDA activities. In Nigeria, the observations made during DQA were discussed during the steering committee meeting which was attended by the FMOH NTD team, RTI ENVISION, TCC, HKI, Sightsavers, CBM, Mitosath and numerous other partners. The participants agreed that the DQA process helped USAID-supported States and Partners identify what they had been doing in the past and work towards improving on identified weaknesses. It was also recognized that the problems identified by the DQA were likely to be echoed throughout the country. It has been recommended that the DQA exercise should be replicated in other non-USAID supported States to find out strengths and weaknesses in the data reporting and management system.

Measuring impact on disease transmission: DSAs. As described earlier, ENVISION provides national programs with technical and financial support to plan, implement, apply and disseminate results from DSAs. Refer to DSA section of this report for DSAs supported in FY14.

Implementing Post-MDA Coverage Surveys. Post-MDA coverage surveys are a tool that can be carried out to validate the reported coverage. This understanding of how surveyed coverage compares to reported coverage can help to inform the understanding of district-specific performance in reaching at-risk and targeted individuals, as well as better inform the decisions about eligibility for DSA. Coverage surveys also offer the opportunity to solicit information about the knowledge, attitudes, and practices (KAP) of community members around NTDs, including understanding their causes; how the MDA was carried out, such as whether the drug distributor actually administered the medication; and reasons for participating or not participating in the interventions.

During FY14, ENVISION conducted post-MDA coverage surveys in four countries (Guinea, Indonesia, Nepal and Uganda). The results from the Post-MDA Coverage Surveys help strengthen the understanding of the validity of reported coverage as well as strategies for improving coverage. For example, coverage survey from one district in Guinea showed higher surveyed coverage than reported coverage, highlighting the challenge of using inaccurate denominators from old census data to assess reported coverage. Another survey conducted in Kapilvastu, a district in Nepal that had failed TAS, validated the MDA results, that is, Kapilvastu, in fact, has improved reported coverage in FY14. The

overall survey in Nepal showed the need for drug distribution by skilled health workers rather than volunteers and the need for effective awareness campaign to educate people about LF and its control measures.

Implementing an Integrated NTD Database: The Integrated NTD Database, developed by ENVISION in collaboration with partners, can be used to effectively store, analyze, and report the NTD data. The database can be tailored to each country's context and used by national NTD programs. During FY14, Nigeria and Indonesia fully adopted the Integrated NTD Database. In January 2014, the program and data managers from all five PC NTDs from the Federal Ministry of Health (FMOH), Zonal coordinators, and representatives from NGOs were trained on a beta version of the database in Abuja, Nigeria. An M&E consultant hired by ENVISION assisted the FMOH to collect and enter historical data into the database. Nigeria became the first country to generate and submit the WHO Joint Reporting Form using the Integrated NTD Database. In July 2014, two-day training on the Integrated NTD Database was held in Jakarta, Indonesia for the sub-directorate staff (LF/STH and Leprosy/Yaws sub-directorates) at the Ministry of Health. The training was followed by data review meetings and drafting an historical data entry plan. ENVISION consultants are in the process of assisting MOH to input historical data into the database and are expected to finish the data entry by December 2014.

Conducting Independent Monitoring. Independent monitoring has been used during MDA in multiple USAID-supported countries to improve the understanding of any populations that are either not being reached by drug distributors or are choosing not to participate in MDA, so that real-time decisions during the MDA can be made to improve coverage. These decisions may include tailoring the social mobilization messages broadcast during radio clips or by town criers, deploying additional drug distributors to a certain area, or extending the duration of MDA. Typically this activity is implemented by individuals who are not associated with the MDA intervention, in order to ensure an objective understanding of the MDA's reach and effectiveness. During FY14, independent monitoring was carried out in four districts in Guinea and this exercise helped to provide feedback on the performance of the drug distributors during the MDA.

Developing a Supportive Supervision Checklist. During FY14, ENVISION began the development of a supportive supervision checklist that incorporates the supportive supervision best practices across multiple ENVISION countries. In FY15, ENVISION will make this resource available to national programs, and provide technical assistance to develop or adjust, if needed, checklists that are specific to each country's MDA strategy and data collection and reporting system.

National M&E Plans: In FY14, ENVISION worked with Nepal to update an existing M&E Plan for NTDs. With the evolvement in global guidelines, and the shift on disease goals based on the achievements Nepal has made in the past few years, it became necessary that the focus of the M&E Plan should be on disease elimination and surveillance for LF and trachoma. A draft M&E Plan for Nepal will be finalized and disseminated in early FY15. A draft M&E Plan for Nigeria will also be finalized and disseminated in early FY15.

Development of M&E Tools

As a global technical leader in NTDs, ENVISION has successfully collaborated with global partners to develop M&E tools that can be utilized by NTD-endemic countries, including but not limited to those that are supported by USAID's NTD projects. During FY14, ENVISION has been involved in the following M&E activities.

DQA Guidelines and Tool. RTI organized a training of trainers on DQA (and Integrated NTD Database) at KEMRI in Nairobi, Kenya in February 2014. The participants of this training helped in extended field testing of DQA during FY2014 and will continue to assist in the roll-out the tool in FY2015. RTI also facilitated a training in London, UK in June 2014 for the representatives from SCI, CNTD, Sightsavers, Malaria Consortium and WHO. ENVISION will continue to coordinate with the DfID-supported partners trained in London to roll-out the tool across NTD-endemic countries supported by USAID and/or DfID.

The DQA guidelines, tools, and training materials were field-tested in multiple ENVISION countries, including Uganda, Cameroon, Indonesia, Nigeria, Senegal, and Tanzania, and with non-USAID support in Nicaragua. Please refer to the section on TA to Country Governments to Develop and Implement Quality M&E Systems for more details. The draft DQA guidelines, tools, and training materials were posted on USAID's DEC. ENVISION will continue to strengthen the DQA materials by incorporating suggestions and feedback from the field-testing of the tool during FY14.

Integrated NTD Database. The development process that started in late FY13 was followed by the field testing of the draft version of the database in Burkina Faso and Nigeria in October 2013. The database development continued and different versions of the database were released to solicit feedback and quality check the product. ENVISION M&E team participated in weekly conference calls with the development team in order to prioritize the development of features, flesh out the components of the database, and resolve issues as they arise. During FY14, ENVISION M&E team reached out to experts in disease-specific programs to seek their input and technical guidance for disease-specific indicators (such as International Coalition of Trachoma Control ICTC, M&E Working Group and APOC) and drug donation programs (such as Mectizan Donation Program MDP, Children Without Worms CWW), and International Trachoma Initiative ITI). Additionally, the M&E team coordinated with the development team to provide frequent updates and calls as needed with other stakeholders including WHO and its regional offices, APOC, CNTD, and other partners. As mentioned above, TOTs on the Integrated Database were held in conjunction with training on the DQA guidelines and tool in Nairobi and London. Finally, the Integrated Database was implemented this year in Indonesia and Nigeria (discussed in more detail earlier this section of the report).

The link to install the Integrated NTD Database and further instructions are now available in WHO server. Once users install the database from this site, they can work offline and simply update to a new version when they are connected to the internet. After the culmination of the ToT in February 2014, a SharePoint site was created by WHO-HQ where the materials related to the database template are available in addition to a discussion forum where users can post their experiences and enquire specific questions related to the database. Responses to specific questions can also be posted in the discussion

forum for the benefit of all users. In addition to facilitating regional and country-specific trainings, ENVISION entertains requests for assistance with downloading and/or trouble shooting the database from any users that are interested in the Integrated NTD Database.

Supportive Supervision Checklist. In FY14, ENVISION collected supportive supervision checklists that are currently in use by national programs in countries supported by ENVISION, and began identifying best practices. ENVISION will finalize the development of a checklist template and disseminate in FY15.

Template for National M&E Plans. RTI collaborated with partners to draft a National M&E Plan template that was disseminated during the AFRO M&E workshops.

Indicator Compendium: During FY14, the Indicator Compendium reference sheets were under review by WHO disease-specific experts. It is anticipated that the Compendium will be released for dissemination and use during FY15. The indicators included in the Integrated NTD Database are in line with the core indicators identified and defined in the Compendium.

Documenting Progress towards Elimination: As countries make progress towards achieving the World Health Assembly NTD elimination goals, it is essential to document disease endemicity, NTD intervention performance, and assessment results, both to be able to monitor progress towards elimination goals as well as to compile the elimination dossiers required for validation or verification. Based on recommendations from a December 2013 WHO M&E subgroup 2 informal meeting, RTI has been working with WHO HQ to develop a draft LF dossier template, based on the WHO TAS manual and including indicators related to availability of MMDP services. The template was piloted in the Philippines and Bangladesh.

Following the WHO MMDP meeting in August 2014 where MMDP indicators were finalized for inclusion in the dossier, RTI presented the revised template at the August 2014 WHO M&E subgroup 2 meeting which will be finalized by WHO and incorporated into the Standard Operating Procedures for LF elimination presented to the STAG-NTD in April 2015. In addition, RTI helped WHO design a revised TAS form to capture supplemental information needed to determine eligibility for TAS.

Global Meetings: Global meetings serve as an opportune time for ENVISION to present its M&E work conducted in collaboration with other partners. As in the past years, ENVISION participated in the WHO M&E Working Group meetings in February 2014, including the M&E Specialist serving as a Temporary Advisor to the working group. Due to the development and implementation of an enhanced M&E strategy under ENVISION and the roll-out of the M&E tools that have been developed by ENVISION in collaboration with WHO and other partners, ENVISION has a wealth of experience from which to identify lessons learned and best practices related to M&E for NTDs.

Support for USAID's M&E NTD M&E System

As USAID's flagship project for NTD control and elimination, ENVISION is responsible for the development of USAID's NTD Program M&E system which consists of several data acquisition tools and a web-based M&E database (see below for more details). M&E data for multiple USAID-supported

activities in NTD control and elimination are stored in USAID's online NTD Database, managed by ENVISION and are used to support agency reporting and guide national programs in making programmatic decisions.

Disease and Program Workbooks and END in Asia Workbooks. Countries in ENVISION and END in Africa are successfully using Disease and Program Workbooks to capture disease-specific data at the district-level and program specific data. In addition, countries in END in Asia are continuing to use END in Asia Workbook to capture country-specific NTD data.

Disease-specific Assessment, Post-MDA Survey Forms. A draft version of disease-specific assessment, and post-MDA coverage survey forms and their corresponding Instructions were developed and shared with the ENVISION team. Preliminary suggestions will be incorporated into the updated versions, which will be disseminated for countries to use during FY15. It is anticipated that all USAID-supported countries will be required to submit protocols and reports to the respective projects starting FY15.

USAID's NTD Database, managed by ENVISION

Since the launch of USAID's NTD Database in FY13, the ENVISION M&E team has worked on a number of fronts to maximize the capacity and utility of the Database for USAID, its NTD projects as well the ministries of health it supports. Since the database was developed with the ability for data to be uploaded at any point in the USAID project reporting process, it is not necessary that every user is comfortable with utilizing the database, but rather only those who are interested and have the appropriate internet resources and computer skills. If a user chooses not to submit data via the database, the workbooks can be emailed to the next level in the reporting process, and can be submitted at that level or emailed to the next level. The M&E team at RTI uploads any data that have not yet been directly submitted into the database, so that the database serves as a complete repository for all project data from ENVISION, END in Africa, and END in Asia.

During FY14, the M&E team held a number of orientation sessions to introduce the database to potential users, including members of USAID's NTD team, HQ staff from RTI, HKI, IMA, and FHI360. Most of the staff in country were trained during FY13. The remaining field staff and MOH that were not trained previously were trained during FY14, including ENVISION field staff in Mozambique and MOH in Cameroon. Ongoing technical guidance on use of the database is provided during country-specific orientations and visits, and through email, phone, and in-person correspondence.

At the time of this report, 38 individuals were currently registered as users (data submitter, data reviewer, data analyst, read-only, etc.). We are still awaiting notification from each country program for identification of a designated MOH representative who will be responsible for signing into the database to approve the data. Currently, the MOH approves the data offline, i.e. in-country partners print the summary pages of the Workbooks and have the MOH person sign.

Populating the Database: In FY14, the ENVISION M&E team successfully uploaded all historical USAID-supported NTD data into USAID's NTD Database. This included 5 years of semi-annual reporting from all

countries supported under USAID's NTD Control Program (2006-2011). Additionally, the M&E team uploaded country data for END in Africa (FY11 – FY14), END in Asia (FY12-FY14), and ENVISION (FY12-FY14) into the Database. A select number of countries have witnessed substantial changes in geographical boundaries due to redistricting and/or alignment of administrative units between MOH and drug donation programs (DRC, Ethiopia, Indonesia, Ghana, Mali, Nigeria, and Tanzania). ENVISION staff are engaged with MOH and other partners such as the International Trachoma Initiative (ITI), which manages the Trachoma Atlas, to resolve these issues. Redistricting issues are resolved and data uploaded into the database for Indonesia, Ghana, Mali, Nigeria, and Tanzania (FY12-FY15). It is expected that data for DRC, Tanzania (FY11 only), and Ethiopia will be available in the database during the first half of FY15.

Managing the geography: The M&E team assigns unique identifiers (ID) for each of the administrative units (region, district) for which NTD data is reported. This unique ID matches the ID assigned to that administrative unit by the Task Force for Global Health (TFGH) which manages data reported to the global drug donation programs. The benefit of maintaining unique identifiers for administrative units is that it helps in resolving discrepancies across reports. It's particularly helpful in creating GIS maps for program management and analysis. This year, the M&E team spent considerable time and effort working with the TFGH and country teams supported by USAID to resolve discrepancies with the number of administrative levels reported, reconcile spelling of names, and record new districts as a result of redistricting. Several discussions and correspondences were dedicated to aligning the administrative levels/units in Tanzania, Nigeria, Mali, Indonesia, Ghana, and Ethiopia.

Also this year, ENVISION worked to quality check a system called GeoConnect that will help maintain harmonization of administrative units across different partners. GeoConnect (<https://geoconnect.linkssystem.org/>), is an open access, online system that provides standard geographic data and manages an online change request system. Currently, RTI, ITI and Mectizan Donation Program (MDP) can request and approve the change in the administrative units used by ENVISION and the drug donation partners.

Data review and reporting. The ENVISION M&E team reviewed and provided feedback for NTD data for multiple USAID-supported mechanisms, including 25 countries supported by ENVISION, END in Africa, END in Asia, and/or other USAID-supported mechanisms. Data is reviewed for completeness, accuracy, and consistency; feedback will be consolidated with that of USAID, END in Africa and END in Asia and shared with countries supported through those projects. RTI's M&E team uses checklists for data review and quality checks that have been developed and distributed to ENVISION and END countries.

Data use and sharing: In February 2014, RTI hosted a meeting with USAID and FHI360 to discuss some of the external requests for data from USAID's NTD Database and gain guidance from USAID on process for both protecting country ownership of the data while also advancing NTD control and elimination and promoting transparency in USAID funded NTD activities.

Please see Table 20 for the features that are already completed and the ones in progress. The activities that were carried out during the reporting period are outlined below.

Table 20. Status of Features in USAID's NTD Database

Features	Status (as of Sept 30, 2014)
Generate pre-populated Workbooks based on previous years/reporting periods	Complete
Generate revised workbooks when edits are made	Complete
Establish review and approvals hierarchy in database	Complete
Develop submission and review process	Complete
Develop checks and flags for data quality during submission	Complete; additional revisions will be made as feedback from users is received and project/portfolio evolves
Create and maintain User Guides	Complete; additional revisions will be made as database is updated
User interface available in English, French, Portuguese	Complete
Launch database for use by MOH, USAID, ENVISION project staff (RTI, sub-partners, HQ and country-offices), other MOH-approved partners	Complete and in-use
Create Standard Reports	Complete; additional revisions will be made as needs are identified
Access to all data in master files, for further analysis offline	Complete
Create customizable Report Builder	In progress
Historical data transfer for FY07-FY11 data from NTDCP Access database to USAID's NTD database	Complete except Tanzania (FY11)
Data transfer for END in Asia data (FY12-FY14)	Complete
Finalize geography issues (DRC, Ethiopia, Nigeria, Tanzania; others as redistricting occurs) and upload data	Complete except DRC, Ethiopia, Tanzania (FY11)
Maintenance and bug fixing	As needed
Register users	As needed
Additional features	As needed

Support USAID staff with Agency Reporting

ENVISION's M&E team provided ongoing technical assistance as needed to the USAID NTD Team regarding the various reporting requirements for the agency, including the U.S. Government's Global Health Program indicator reference sheet, website, fact sheet, progress report and data call; Annual Performance Report; Annual Priority Goals; and Performance Plan and Report.

Environmental Mitigation and Monitoring Report (EMMR). Draft Supplemental Initial Environmental Examinations were submitted for Benin, Guinea, Indonesia, Mali, Mozambique, Tanzania and Uganda during the reporting period. As SIEEs are approved by the USAID environmental officer, EMMRs will be prepared and submitted. All sub-agreements and fund transfers to ENVISION implementing partners incorporate provisions stipulating the need to complete an annual environmental monitoring report;

activities undertaken are within the scope of the environmental determinations and recommendations of the Programmatic Initial Environmental Examination (PIEE). An EMMR was submitted for ENVISION in accordance with the Programmatic Initial Environmental Examination (PIEE). The ENVISION project is currently in full compliance.

NTD Policy Dialogue

Policy dialogue takes place at many different levels, starting globally but extending to the regional, national and local levels. At each of these levels ENVISION plays an active role bringing its real-world experience to bear on policy decisions. The ENVISION project is global health's largest single supporter of NTD program implementation, and as such, its experience is called upon first to formulate and then to evaluate global guidelines; to define best practices; to set control and elimination strategies; and to determine the challenges remaining to be addressed. ENVISION staff works closely with USAID to provide technical leadership at WHO, in the donor community, and at the national MOH level by actively participating in global and national fora as well as through developing specific program tools and strategic approaches.

Since NTD programs are comparatively new public health ventures, as national programs mature, countries repeatedly face new challenges that have never before been met. Monitoring and evaluation of program activities become increasingly important, and the tools to track progress or identify program weak spots must be developed or refined and improved to be able to inform policy development. Then, when the decision to stop programs after they have achieved success (or believe they have achieved success) must be made, these national programs require guidance from a global policy that can only be developed on the basis of available experience. For all these reasons USAID and its ENVISION project have become essential collaborators with WHO and WHO/APOC in designing, effecting and troubleshooting the NTD programs globally, first at meetings and then in country.

Participation in Global Forums

A list of global meetings that ENVISION participates in is outlined in Table 21. ENVISION staff contributions to NTD technical working groups is summarized in Table 22.

Table 21. Global Technical Meetings with ENVISION Participation

Meeting	ENVISION Objective	What investment/contribution will RTI make to address this objective(s)?	What outcome(s) will be attributable to RTI/ENVISION?
WHO			
WHO Working Group on Drug Access	Coordinate PZQ procurement with other partners	RTI presents its PZQ distribution plan (by country, year, and quantity of drugs). RTI/ENVISION influences other partners to demonstrate same level of transparency, and leads coordinated examination of plans for areas of duplication.	Globally drugs are distributed where needed and duplication among partners is avoided
WHO Regional Program Review Groups (AFRO, SEARO, WPRO, AMRO); APOC JAF	Support ENVISION countries in reporting to technical oversight groups and participate in regional decision-making affecting those countries.	RTI identifies donor support and yearly expectations for NTD programs of ENVISION countries	Decisions of RPRG will be informed so as to promote harmonization between donor resources available (funds and assistance) and country and regional expectations.
WHO Working Group on Capacity Building	Organize global capacity building initiative; identify most effective role for ENVISION activities integrated with the global strategic plan	RTI will take the lead in developing specific training modules and will support the roll out in ENVISION countries and sometimes regionally	Global capacity strengthening initiatives will benefit from both the experience of the ENVISION team and from its resources (technical and financial) that help translate this experience into real training activities.
WHO Working Group on M&E/Impact/data management	Optimize data collection tools and strategies for ENVISION countries in line with WHO norms	RTI will contribute its exceptional M&E and data management expertise to developing WHO's global norms and will enhance its reputation as a global leader in M&E	By leading the development of Integrated NTD database and M&E tools, RTI ensures that the experience of all USAID-supported countries is utilized in creating the most effective global norms and tools available
WHO/NTD-STAG M&E Working Group	Resolve uncertainties in mapping, new diagnostics, surveillance strategies and criteria for elimination of LF	RTI will invest its experience, expertise and national program linkages to help develop the appropriate norms and algorithms for program implementation	By providing its actual programmatic experiences, RTI will ensure development of norms that reflect USAID concerns and identify O. R opportunities to be pursued
PHARMA			
Expert Committees of major drug donation programs (i.e.,	Maintain close relations with drug donation programs; ensure coordination between drug donations to ENVISION	RTI reports on the contributions of USAID implementation funds for supporting the needs of ENVISION countries to deliver	Effective harmonization between drug donations and implementation resources for the ENVISION countries, and creation

Meeting	ENVISION Objective	What investment/contribution will RTI make to address this objective(s)?	What outcome(s) will be attributable to RTI/ENVISION?
Mectizan/ ALB, Zithromax and MBD) and meetings of the pharma coordination group (PDCI)	countries, availability of adequate support for implementation and consistency in the management of SAEs	the donated drugs during MDA; RTI coordinates the development and dissemination of tools and training materials on SAEs	of a model for management of SAEs in all NTD programs.
NGDOs			
Annual Meetings for Uniting to Combat NTDs, GAELF, GET2020, NGO NTD Network, TCC, ICTC	Engage with the global community of NTD partners and coordinate implementation activities with NGDOs	RTI will take leadership roles in both the NGDO umbrella organization (NTD NGDO Network (NNN)) and ICTC, as well as influential roles in each of the other NTD-specific NGDO groups	RTI will share experience from USAID-supported countries with all other NTD NGDOs and will significantly shape the formulation of 'best practices' for NGDO support to national NTD programs.
OPERATIONAL RESEARCH			
Operational Research programs funded by the BMGF: 'Filling the Gaps', DOLF, SCORE, Trachoma; Coalition for Operational Research in NTDs (COR-NTD) Global Development Alliance (GDA)	Link needs of implementation programs to research community; provide essential collaboration opportunities for operational researchers	1) ENVISION's identification of needed implementation research will be shared with the broader community; 2) ENVISION can facilitate the necessary linkages between researchers and actual NTD programs that can become involved in the research.	1) The most important operational research needs for NTD program success will be identified; 2) The essential link between those with the research need and those who can help meet this need will be established.
AFRO: Africa Regional Office, APOC: African Programme for Onchocerciasis Control, CWW: Children without Worms, DOLF: Death to Onchocerciasis and Lymphatic Filariasis GAELF: Global Alliance to Eliminate Lymphatic Filariasis, GET2020: Alliance for the Global Elimination of Blinding Trachoma by 2020, ICTC: International Coalition for Trachoma Control, JAF: Joint Action Forum, PDCI: Partnership for Disease Control Initiatives			

Table 22. ENVISION Staff Contributions to Global Working Groups

ENVISION Staff Member	Name of Working Group or Sub-Working Group Representing
Achille Kabore	WHO/AFRO Regional Program Review Group (RPRG) meeting June 2014 Brazzaville/Congo: Provided technical support to review Countries TAS proposals and Mapping reports in the WHO African Region. Attended technical group discussions around strengthening the RPRG mechanisms.
	Meeting of the Neglected Tropical Diseases Network (NNN) Paris France September 2014: Contributed to the discussions of three working groups: the STH coalition, the LF group and the Onchocerciasis control group. Participated to panel discussions around challenges of the NTD programs in conflict and post -conflict countries
Achille Kabore, Eric Ottesen	WHO AFRO Coordinated Mapping Group
Amy Doherty	WHO Temporary Advisor on WHO's Working Group on Capacity Strengthening
	WHO Working Group on Drug Supply
Eric Ottesen	WHO AFRO Regional Program Review Group
	WHO WPRO Regional Program Review Group
	Bill and Melinda Gates Foundation STH External Advisory Group
	Coalition for Operational Research on the NTDs, Task Force for Global Health
Jennifer Leopold	Co-Chair ICTC Communications and Advocacy Working Group
Katie Crowley	Co-Chair ICTC MDA practices and capacity strengthening working group
Katie Zoerhoff	WHO Temporary Task Force for Impact Assessment of Preventive Chemotherapy
Katie Zoerhoff, Eric Ottesen	WHO Working Group on M&E of PC
Lisa Rotondo	Uniting to Combat NTDs Strategic Working Group, under NNN Vice chair role
	Uniting to Combat NTDs Entity sub-committee, under NNN Vice chair role
	ICTC MDA working group, stepped down as co-chair in June 2014
	WHO Ad hoc Working Group -GET2020
	NTD NGDO Network Vice chair
	ICTC Strategic Working Group
	Global Trachoma Mapping Project
Molly Brady	WHO LF MMDP core group: Attended WHO August 2014 meeting, served as rapporteur
	LF NDGO Network: Appointed as Vice-Chair in September 2014
	WHO M&E Subgroup on Disease-Specific Indicators: These are ad-hoc groups as appointed by WHO or Pat Lammie (the chair) for a meeting. Molly took part in and rapporteured two meetings - one in December 2013 in Atlanta and one in August 2014 at WHO in Geneva
	WHO Core Working Group on LF MMDP
Philip Downs	Co-Chair, ICTC eHealth Working Group
	LF Network – WASH: Represented LF network at WASH working group meeting at NNN

Development of Global Guidelines and Policies

The greatest guideline/policy challenge for the NTD community today lies in the domain of decision-making, especially that coming after years of MDA for each of the NTDs. The guidelines under which the programs first began were largely conceptual, but now after a decade of USAID support, the guidelines can be refined and updated based on empirical findings. The unique position that USAID NTD projects have with national ministries of health and their implementation platforms affords them the opportunity both to lead consensus building in global policy and to roll out the most appropriate technical and strategic approaches to the NTDs through appropriate capacity building especially in

countries supported by USAID. ENVISION project staff made numerous contributions to the development of guidelines and policies this year. These contributions are summarized by disease below.

For LF

Development of “Re-mapping guidelines”. Stimulated by TZ and Ethiopia where initial mapping results were very close to the 1% threshold for MDA or where the second assessment during its establishment of sentinel sites did not confirm the first set of positive findings, M. Brady, A. Kabore and E. Ottesen participated in debates during meetings in Brazzaville, Geneva and Atlanta that eventually resulted in new interim guidelines (practical algorithms and new sampling protocols) to address these problems, and which will formally adopted by WHO/STAG in 2015. Guidelines and protocols will be included in ENVISION-supported WHO M&E training workshops and in the WHO Program Managers Training Course.

Introduction of new diagnostic for LF. Stimulated by the manufacturer’s change from ICT card test to Filariasis Test Strip (FTS) to assess LF serologically, ENVISION teams from DRC, Senegal, Tanzania and Uganda provided direct comparisons between old and new diagnostics in different settings. The results of which were then reviewed and assessed in meetings in Geneva. D. Cohn, A. Kabore, E. Ottesen also helped to support. As a result, a new FTS diagnostic was recommended to replace ICT by late 2015; the current guidelines to be modified immediately. There is also a plan to share new ‘bench aids’ and training not yet defined

Defining and documenting ‘LF elimination’. M. Brady and E. Ottesen gave presentations and prepared draft documents for debates in Geneva and elsewhere over the meaning of ‘LF elimination as a public health problem’ and the appropriate target of LF Elimination Programs. WHO has now defined ‘validation of elimination’ as the appropriate acknowledgement of country LF elimination program success; the dossier of evidence that must be submitted to demonstrate this achievement has been prepared by M. Brady but is still under WHO review.

Morbidity Management and Disability Prevention (MMDP) guidelines. M Brady and P Downs continued work begun at WHO in 2013 to develop standard policies on the approach to LF morbidity and generated a protocol that is the basis of new WHO guidelines for MMDP. The guidelines will be shared with partners and countries, but likely not implemented directly by ENVISION, but through USAID and UK supported MMDP grants.

For Trachoma

Mapping strategy. The trachoma community and WHO recognized that NTD mapping efforts must be standardized, fast, accurate, available and secure. As a result, revised guidelines and practical tools were developed for the GTMP. P. Downs and L. Rotondo provided oversight in developing and testing tools (in Uganda, Mozambique and elsewhere) to meet the recognized needs, which were rolled out as part of GTMP training coordinated through the GTMP and supported by ENVISION in its supported countries.

Surveillance. With no WHO guideline for post-MDA surveillance to assure program success, K. Crowley, E. Ottesen, and L. Rotondo participated in debates and discussions in DC, Atlanta and elsewhere that

culminated in a WHO meeting in Atlanta where post-MDA surveillance guidelines for trachoma were drafted. New guidelines will be recognized immediately as 'interim' and will be formally adopted by WHO/STAG in 2015. ENVISION will first apply the new interim guidelines in Nepal and then expand to other countries as they pass their TIS and are ready to begin the surveillance.

For STH

Assessing STH prevalence. Countries completing their LF elimination programs with its annual community-wide ALB distribution needed to reassess their STH problem (i.e., endemicity). M. Brady, and E. Ottesen participated in discussions and protocol development to assess STH in coordination with the TAS surveys used for LF programs to decide on stopping MDAs or post-MDA surveillance; ENVISION's Indonesia team implemented the protocol and contributed to its multicenter evaluation. As a result, new WHO policy guidelines have been published for how/when to reassess STH endemicity. These will be incorporated as new tool into relevant training workshops.

FY14 Publications

Ichimori K, King JD, Engels D, Yajima A, Mikhailov A, Lammie P and **Ottesen EA**. Global Programme to Eliminate Lymphatic Filariasis: the processes underlying programme success. PLoS Negl Trop Dis (in press).

Ramaiah KD and **Ottesen EA**. Progress and impact of 13 years of the Global Programme to Eliminate Lymphatic Filariasis on reducing the burden of filarial disease. PLoS Negl Trop Dis (in press).

Hooper PJ, Chu B, Mikhailov A, **Ottesen EA** and Bradley M. Assessing progress in reducing the at-risk population after 13 Years of the Global Programme to Eliminate Lymphatic Filariasis. PLoS Negl Trop Dis (in press).

Flueckiger RM, Nikolay B, Gelderblom HC, Smith JL, Haddad D, Tack W, Hendrickx G, Addiss D, Cano J, Hatcher DR, Hopkins A, Pullan RL, Pavluck A, **Ottesen EA** and Brooker SJ. Integrating data and resources on Neglected Tropical Diseases for better planning: the NTD mapping tool (www.NTDmap.org). PLoS Negl Trop Dis (in press).

Pavluck A, Chu BK, Flueckiger RM, **Ottesen EA**. From Innovation to Application: Electronic Data Capture Tools for Global Health Programs: Evolution of LINKS, an Android-, Web-Based System. PLOS Negl Trop Dis 10.1371/journal.pntd.0002654 published 10 Apr 2014.

Downs PW, Bardin LE, McFarland DA. *Modeling the dynamics of incentives in community drug distribution programs*. Trends Parasitol. 2014 Apr 29. pii: S1471-4922(14)00055-5. doi: 10.1016/j.pt.2014.04.001.

Wouters OJ, Downs PW, Zoerhoff KL, Crowley KR, Frawley H, Einberg J, Chu BK, **Brady MA**, Oscar R, Jeudi M, Desormeaux AM, Coly K, **Direny AN**, Thakur GD, Pokharel RK, **Sharma S, Raman DP**, Sesay S, Sonnie M, **Kilembe B**, Mwingira U, Yajima A. *Resource planning for neglected tropical disease (NTD) control programs: feasibility study of the Tool for Integrated Planning and Costing (TIPAC)*. PLoS Negl Trop Dis. 2014 Feb 27;8(2):e2619. doi: 10.1371/journal.pntd.0002619. eCollection 2014 Feb.

Handbook for Managing Adverse Events (AEs) following MDA and SAEs. Working closely with the Task Force for Global Health and many individuals and organizations, RTI published the “Handbook for Managing Adverse Events (AEs) following MDA and SAEs” which provides a user-friendly, step-by-step approach for the management of AEs-f-MDA and the reporting of SAEs by managers of preventive chemotherapy programs. It is designed to supplement the recently released, more extensive WHO guidelines “Assuring Safety Of Preventive Chemotherapy Interventions For The Control Of Neglected Tropical Diseases: Practical Advice For National Programme Managers On The Prevention, Detection And Management Of Serious Adverse Events” and draws heavily from the rich experience of immunization programs. A dissemination plan including training on the WHO guidelines is outlined in the FY15 work plan.

Identifying and Addressing Global Technical, Programmatic and Operational Challenges

RTI and its partners on the ENVISION project collaborate with USAID, ministries of health and other global NTD partners to identify and address technical, programmatic and operational problems facing NTD programs. ENVISION made substantial contributions this year to a number of notable challenges, as highlighted below.

Backlog of TAS eligibility reviews. If all programs operated as prescribed in the guidelines for LF programs, there would be no need for outside review of the decision to be taken after 6 years of successful MDA. However, there are always things that did not go as planned, and therefore when the time comes to make the decision about stopping-MDA or even to begin the stopping process, since there is considerable expense or risk associated with the decision, WHO guidance is necessary to provide technical backing of the country’s decision. RPRG is the regional arm of WHO but, in AFRO, it had not met for the past two years and elsewhere did not broadly have the technical expertise to help countries make these important decisions. RTI, with its own technical expertise along with the expertise of those enlisted to work with the project, provided, first, the interim backup recommendations to such countries and, second, prepared the RPRG to handle these issues either on an emergency basis (AFRO in March) or more deliberately (WPRO in July, SEARO in August/September).

Interpreting failed TAS. This issue again falls under the purview of RPRG, but again few (including the RPRG) have much experience in dealing with it. Particularly challenging was the situation in Indonesia where failure caused political push-back on what to do to end the programs, but eventually ENVISION (and ENVISION-enlisted) advice was adopted. This situation was especially challenging because the tool used for the TAS in *Brugia* infections is an antibody assay (instead of the antigen assay used for *bancrofti* infections), and there is less global experience in interpretation of its results. The results of the ENVISION efforts both helped the national program and guided the RPRG on how to handle such situations in the future.

Global trachoma mapping. Completing the global map of trachoma prevalence was an achievement few thought possible five to ten years ago. With the increase in funding for trachoma mapping from USAID through the ENVISION project and from DfID through the Global Trachoma Mapping Project

(GTMP), ministries of health have been able to conduct baseline trachoma prevalence surveys using standardized methodology in a diverse array of countries. These surveys have allowed ministries and partners to determine where SAFE strategy implementation is necessary, giving a more precise forecast of financial and resource (drug) needs for global elimination.

Beginning to forecast needs for TAS and TIS. It is rather clear now how to predict costs and resources needed for the MDA phases of programs, but in the assessment phases there is a major shift in costs, expertise and materials. Because ENVISION (including its work with END in Africa) has the greatest experience with programs reaching these critical points, it has been able to develop an empirical understanding of how to forecast what will be required for the LF and trachoma programs reaching these points over the next years. These forecasts are relevant not only for the costs that will have to be borne by USAID and others to support the surveys and data management associated with the TAS and TIS but also to acquire the diagnostic supplies and to ensure that they are being manufactured in sufficient quantity to meet program needs.

LF programs with loa co-endemicity. Central Africa has been approached very gingerly by the GPELF because of a cost-benefit concern focused around the potential SAEs (including death) that can arise from inadvertently treated, co-endemic loiasis. Because ENVISION must work with many of these countries, its leadership has been intimately involved in developing the algorithms being devised to maximize the impact of treating LF while minimizing the risk of complicating SAEs. The ‘safe LF regimen’ for loa areas recommended by WHO is twice-yearly ALB and broad coverage with bednets. This is being supported by ENVISION through work in Nigeria with the Carter Center, and elsewhere (DRC, Cameroon) diagnostic trials are underway with new serologic tools for LF, oncho and loa that try to substantiate the extent of the endemicity of these three infections. A complicating factor (which might be exploitable for diagnosis) is the recent observation that the ICT test for LF is also positive in most high-intensity loa infections. This observation suggests that much remapping might have to be done to clarify the true endemicity of LF in areas formerly testing positive for it only through the use of ICT.

Linking programs and OR groups. One of the true comparative advantages of the ENVISION project among all other NTD programs is its intimate, front-line engagement with so many Ministries of Health and their NTD programs. While this exposes all the uncertainties and research needs associated with these programs, it also provides opportunities to link the research challenges with interested researchers willing to focus on operationally relevant problems. ENVISION-supported programs have linked with other researchers from RTI, from (or associated with) the Task Force for Global Health, from CNTD and others. Such research during FY14 has included studies of coverage and compliance, costs, new mapping strategies for trachoma, and alternative treatment strategies for schistosomiasis among these. Publications from some of the projects completed or published this year are listed above. Now that USAID has invested through a grant to the TFGH to coordinate operational research to support its NTD programs, it is anticipated that the engagement of ENVISION in such critical research will be increased (and increasingly important).

Challenges for FY15

Inadequate coverage. Good coverage is essential for success of the MDA programs, and there are many reasons for not achieving good coverage. Intensive effort at modifying logistics, communication and behaviors will be initiated using newly developed tools (DQA, coverage surveys and other tools) to assess effectiveness of newly introduced programmatic changes.

Surveillance. As indicated above, for trachoma there is a new post-MDA surveillance strategy now approved by WHO. ENVISION countries will be among the first to implement and test this strategy, beginning with Nepal in Q2 FY15. For LF, the recommended surveillance strategy of repeated TAS at 3 year intervals for 6 years will continue to be assessed, but with the addition of new diagnostic tests to supplement the ICT/FTS now used as the principal diagnostic tool.

Ebola co-endemicity. The kinds of challenges this viral infection will bestow on the NTD programs are likely to be more social and logistical than biological. Ebola is wreaking havoc with health systems and public confidence in health programs. The research that will be relevant to this ‘significant issue’ in FY15 will likely be social and logistical, and it can only be hoped that the outbreak remains as confined as it is today and that it burns itself out quickly in the affected countries. ENVISION will be attentive to the particular and changing needs of these countries.

Change in LF diagnostic. As described above, the manufacturer of ICT tests is changing the format of the test to a filariasis test strip (FTS). While the data available comparing the two tests was good enough for WHO’s expert committees to recommend accepting the proposed change, still it will pose challenges to countries to implement the testing correctly and interpret the results and their implications appropriately. Clearly, there will need to be more parallel testing and work to ensure that the sensitivity and specificity of the new test permit the existing guideline’s ‘decision rules’ to continue to be used.

Onchocerciasis delineation mapping. The shift in the target of onchocerciasis programs from morbidity control to transmission elimination means that areas formerly below the level of endemicity associated with significant morbidity now must be ‘mapped’ further to know where the focus of endemicity ends. This is termed ‘delineation mapping’ and will require close working with the APOC teams who have done most of the oncho and loa mapping in the past and the researchers who have the newer tools expected to be able to facilitate this mapping. ENVISION will be an essential partner in these investigations.

Stopping decision for oncho and LF in co-endemic areas. Since oncho and LF programs share a dependence on the drug ivermectin, coordinating when to stop MDAs using ivermectin for each of the programs will be necessary. Unfortunately, as yet no defined protocol has been available to understand how or when to do this. This research problem has practical immediacy and will be a real challenge for the ENVISION-supported (and ENVISION-assisted through TAF and otherwise) countries in Africa.

Testing new diagnostics. Essentially all of the NTDs (LF, oncho, trachoma, schisto, STH, [+loa]) currently utilize poor, or even rudimentary, parasitological diagnostic tools. However, new studies have upgraded

the available diagnostics to those based on antibody or DNA detection that can be both standardized and quantifiable. Indeed, there are one or more new diagnostic tools available for each of the NTDs, and during FY15 it is expected that enormous gains will be made in providing practical tools that will ensure better monitoring of the NTD programs. ENVISION will play a major part in rolling out and testing these new diagnostics.

NTD Operational Research

ENVISION worked this year with multiple partners to facilitate the start of several operational research activities, many of which will continue into FY15. See Table 23. These opportunities are made possible through platforms and activities supported by ENVISION and in collaboration with other NTD researchers such as the NTD-SC, CNTD and Sightsavers. All activities are conducted in partnership with the MOH and designed in response to the needs of the national programs which they support. When and where appropriate, ENVISION staff have assisted researchers to coordinate their projects with routine M&E and/or mapping activities. ENVISION country teams will work with MOH and partners to disseminate findings through publications and scientific conferences throughout FY15 as results become available. Unless the activity was included in an approved ENVISION work plan for FY14, funding for specific research activities came from a partner organization and not from ENVISION.

Table 23. NTD Operational Research under ENVISION, FY14-FY15

<p>Alternative Approaches to Coverage Surveys</p> <p>Objective: to compare the cost, time and feasibility of 3 different survey sampling methodologies (Expanded Program for Immunization (EPI) approach, Lot Quality Assurance Sampling (LQAS) design and probability sampling) for conducting coverage surveys.</p> <p>Country: Uganda; Year: 2014-2015; Collaborators: NTD-SC</p>
<p>Trachoma Impact Surveys</p> <p>Objective: to identify which tool is most appropriate for use with trachoma impact assessments to decide whether MDA can safely be stopped.- part of a multi-center study comparing detection by clinical (TF), infection (polymerase chain reaction (PCR)) and serologic (antibody by enzyme-linked immunosorbent assay (ELISA)) tools.</p> <p>Country: Uganda; Year: 2014 – completed; Collaborators: NTD-SC</p>
<p>Methods for Prioritizing Trachoma Population-based Prevalence Surveys</p> <p>Objective: To develop and validate methodologies for determining which districts should be targeted for district level prevalence assessments by population-based probability sampling. <i>[Preliminary report available for Uganda and Tanzania]</i></p> <p>Countries: Uganda, Tanzania, DRC; Year: 2014 – Completed; Collaborators: CNTD</p>
<p>Disability Assessment for Trachoma Programs</p> <p>Objective: development of tool for use during impact assessment surveys to evaluate abilities of patients to access surgeries and of programs to assess percentage of trichiasis patients that refused surgery.</p> <p>Country: Uganda; Year: 2014 – Completed; Collaborators: Washington Group, Sightsavers</p>
<p>Development of an SMS Reporting Tool for MDA</p> <p>Objective: to develop and expand current HMIS mTrac system (SMS-based) for the collection of MDA data.</p> <p>Countries: Uganda, Nigeria; Year: 2014-2015; Collaborators: UNICEF, NTD-SC, Sightsavers</p>
<p>Feasibility of Integrating TAS and STH Assessment</p> <p>Objective: to pilot a new STH evaluation methodology (based on the TAS sampling protocol) implemented at the time of a TAS. <i>[Report available]</i></p> <p>Countries: Indonesia, Uganda, Benin, Tanzania; Year: 2014-2015; Collaborators: NTD-SC</p>
<p>User of Antibody Testing to Assess LF Program End-points in <i>Brugia</i> Areas</p> <p>Objective: to assess the value of antibody testing (antibody <i>vis-à-vis</i> microfilaraemia for defining endpoints in programs targeting <i>Brugia</i> LF infection</p> <p>Countries: Indonesia; Year: 2014-2015; Collaborators: NTD-SC</p>
<p>Cost Effectiveness Analysis</p> <p>Objective: Comparison of costs for Single- and Multiple-Round Mass Drug Administration in [report available]</p> <p>Countries: Uganda; Year 2014; Collaborators: Emory University</p>
<p>Impact of Shoe Distributions</p> <p>Objective: Evaluate impact of shoe distributions on school-based deworming programs</p> <p>Countries: Uganda; Year 2014-2015; Collaborators: Uganda Ministry of Health</p>
<p>Onchocerciasis, STH, and LF overlap</p> <p>Objective: Impact of oncho and STH treatments on LF mapping and baseline Mf in two provinces</p> <p>Countries: DRC; Year 2014; Collaborators: CDC</p>